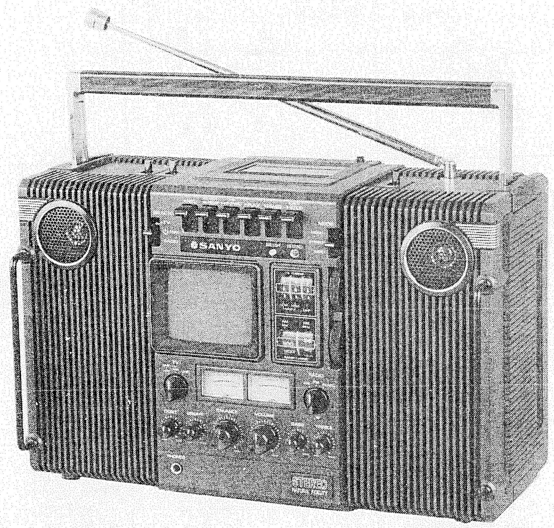
SERVICE MANUAL

B/W TELEVISION WITH
AM/FM STEREO RADIO &
CASSETTE RECORDER

SANYO

MT4240

(EUROPE)



SPECIFICATIONS

Television System	"B" type, 625 lines/frame, 25 frames/sec., 50 fields/sec.
Frequency Range	VHF Channels 2 - 12 UHF Channels 21 - 69 AM 530 - 1605 KHz FM 87.5 - 108 MHz
Antenna Input Impedance	75 ohm
Intermediate Frequency	TV: Picture 38.9 MHz Sound 33.4 MHz Radio: AM 460 KHz FM 10.7 MHz
Picture Tube	10cm diagonal, 50° deflection, 100EB4
Cassette Recorder	
Recording System	AC Bias
Erasing System	AC Erasing
Tape Speed	4.75 cm/sec.
Rewind & Fast Forward Time	100 sec. (C-60 Cassette)
Wow & Flutter	0.3% JIS WRMS, 0.6% DIN
Frequency Response	40 – 10,000 Hz (Normal) 40 – 12,000 Hz (Chrome)
Signal to Noise Ratio	45 db

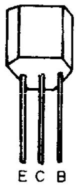
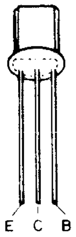
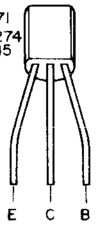
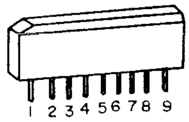
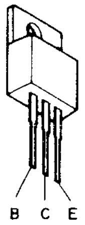
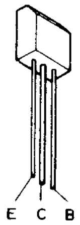
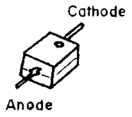
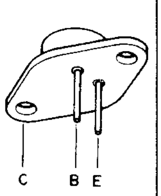
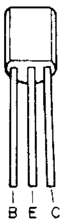
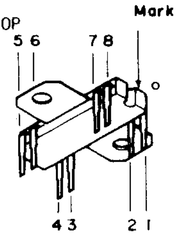
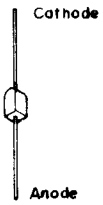
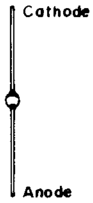
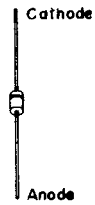
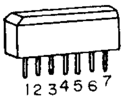
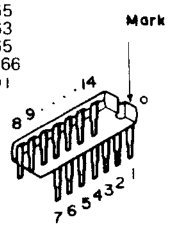
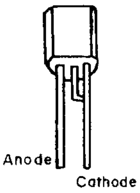
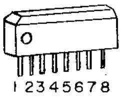
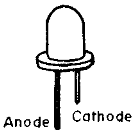
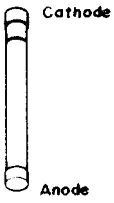
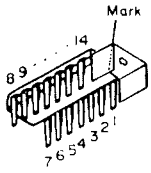
Terminal Impedance	Mic: 0.3mV, 4.7K ohm DIN IN: 0.3mV, 4.7K ohm DIN OUT: 0.6V, 1.5K ohm Headphone: 8 ohm EXT SP: 4 ohm
Semiconductors	IC 9 Transistor 42 Diode 62 LED 2
Loudspeaker	10 x 15cm (2 pcs.) 5cm diameter (2 pcs.)
Audio output	2.5 W/ch at 10% THD 3.5 W/ch max.
Power Source	AC 220V 50Hz, External DC 12V, Rechargeable battery pack(option), 7 "IEC R20" cells(option)
Power Consumption	AC 22 W External DC 16 W
Dimensions	41.6(W) x 27.6(H) x 21.1(D) cm approx. (without handle)
Weight	7.4 kg. approx. (set alone)

NOTE: Specifications are subject to change without notice.

WM3681

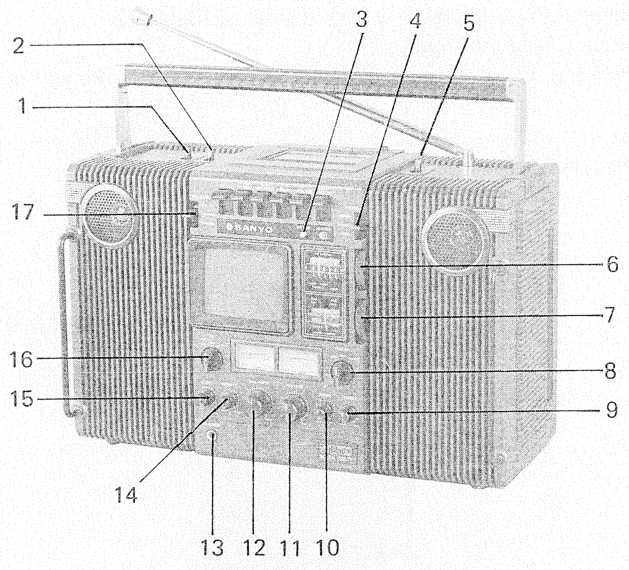
TKD.EURA

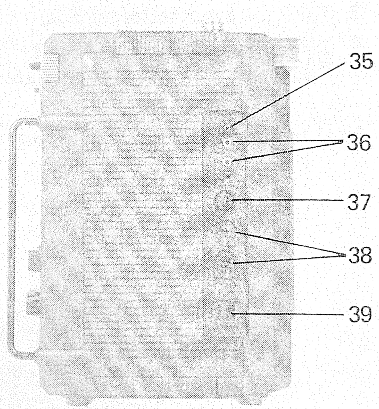
TERMINAL VIEW

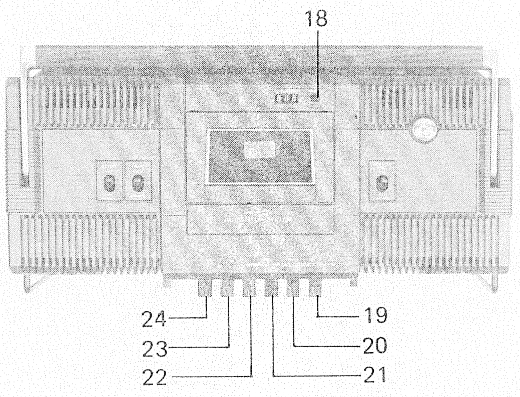
2SC668  	2SA495  	TO - 92 2SA608 2SA643 2SA659 2SA733 2SC536 2SC945 2SC1175 2SC1293 2SC2228 2SD400 2SB598 2SC930 2SC929 2SC1571 2SC2274 2SD545  	LA3210 TA7137P  	TO - 220AB 2SB511 2SC1507 2SC1520 2SC1755 2SC1756 2SD313 2SD325 2SD386 2SB507 
2SC983 2SC1941  	MA56  Cathode Anode	TO - 3 & 66 2SB375 2SC1295 2SC1046 2SC1050 2SD575  	2SC2057  	LA4030P  Mark 5 6 7 8 4 3 2 1
HFSD-1C/HF-1C  Cathode Anode	1JZ61 1R5TH61 ERC27-13  Cathode Anode	1S553 1S188 1S1834 1S2076 BZ-110 ERB24-02D ERB24-04D ERB24-06D RD7.5E RD11F SIB01-02 SM-1-02FR WZ-075 WZ-063 RD5.1EB  Cathode Anode	TA7140P  	LA3301 CA3065 LA1363 LA1365 SN76666 LA1201  Mark 8 9 · · · · 14 7 6 5 4 3 2 1
µPC574J  Anode Cathode	LA3160  	SLP-131B  Anode Cathode	EDMF-15B EDMF-20B EDMF-25B RF03E14  Cathode Anode	LA4201 LA4112  Mark 8 9 · · · · 14 7 6 5 4 3 2 1

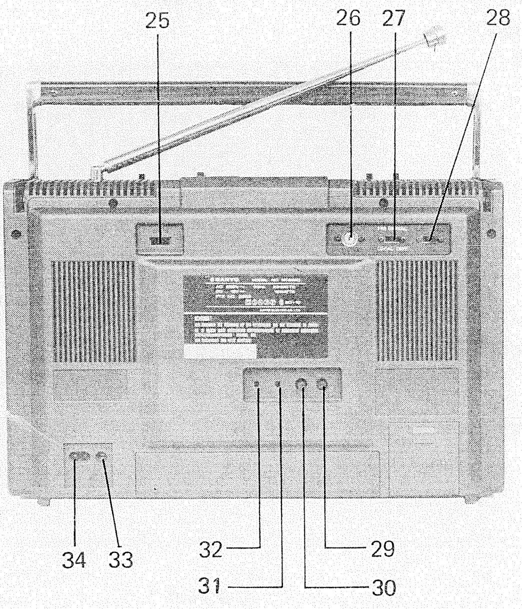
E : Emitter C : Collector B : Base S : Shield

CONTROLS AND TERMINAL IDENTIFICATION









1	Sleep Switch
2	Tape Select Switch
3	Dial Light Switch
4	Mode Switch
5	Mic Switch
6	TV Tuning Knob
7	Radio Tuning Knob
8	FM/AM Band Select Switch
9	Treble
10	Bass
11	Volume
12	Balance
13	Headphone Jack
14	Brightness
15	Contrast
16	TV Band Select Switch
17	TV/ ⏻ (Tape)/Radio Select Switch
18	Tape Counter Reset Button
19	Stop/Eject Button
20	Pause Button
21	Playback Button
22	Fast-Forward/Cue Button
23	Rewind/Review Button
24	Record Button
25	Beat Cancel Switch
26	TV/FM Aerial Socket
27	FM Sensitivity Switch
28	Aerial Select Switch
29	Horizontal Hold
30	Vertical Hold
31	Height
32	Vertical Linearity
33	External DC Socket
34	AC Input Socket
35	Remote Control Jack
36	External Mic Jacks
37	Record/Playback DIN Socket
38	External Speaker Jacks
39	Charge Switch

MECHANICAL DISASSEMBLIES

CABINET BACK & SIDE TERMINAL BOARD REMOVAL

1. Place set face down on a soft protective surface.
2. Remove four screws(A) and two screws(B) holding Cabinet Back and remove back. (Refer to Figure 1)
3. Take the Side Terminal Board out from the Cabinet Front. (Refer to Figure 2)
4. Take out the 4P socket from the Jack P.C.B. and lead out socket through the hole in the chassis frame and remove the Cabinet Back completely. (Refer to Figure 3)

Now the Jack P.C.B. and Antenna Terminal Board can be removed and inspected.

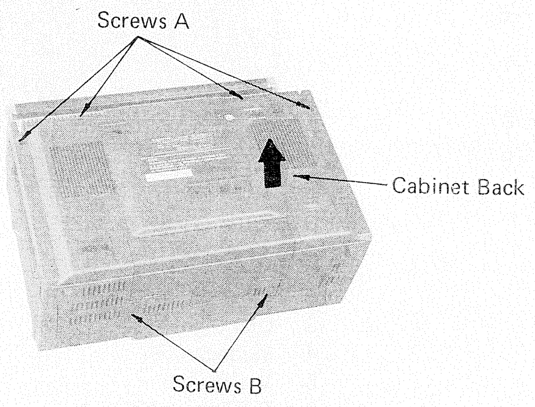

Screws A
Cabinet Back
Screws B

Figure 1

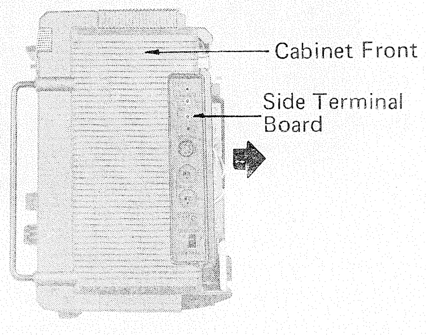

Cabinet Front
Side Terminal Board

Figure 2

JACK P.C.B. REMOVAL

The Jack P.C.B. can be removed when two screws(C) are removed. (Refer to Figure 3)

ANTENNA TERMINAL BOARD REMOVAL

Remove a screw(D) and pull the Antenna Terminal Board in the direction marked with an arrow. (Refer to Figure 4)

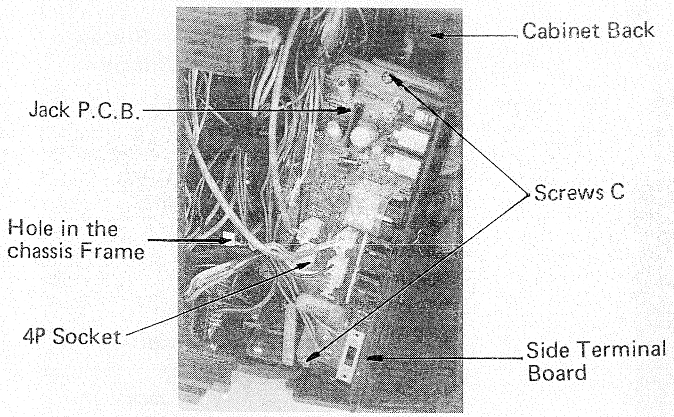

Cabinet Back
Jack P.C.B.
Screws C
Hole in the chassis Frame
4P Socket
Side Terminal Board

Figure 3

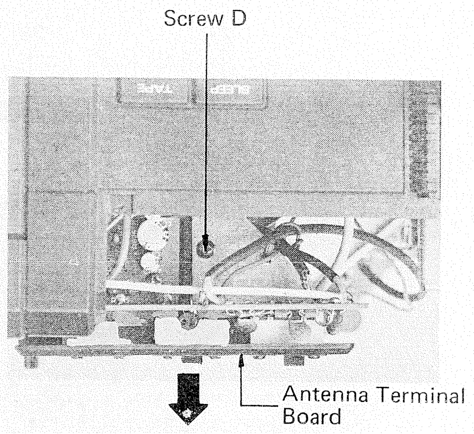

Screw D
Antenna Terminal Board

Figure 4

CABINET FRONT REMOVAL

1. First remove the Cabinet Back and the Side Terminal Board.
2. Take out eight knobs(TV-BAND, RADIO-BAND, CONTRAST, BRIGHTNESS, BALANCE, VOLUME, BASS and TREBLE).
3. Remove seven screws in Figure 5 marked with an arrow.
4. Pull out the Cabinet Front carefully.

* When removing the Cabinet Front completely, take out 3P built-in mic lead sockets(right and left channels) from the Jack P.C.B., 2P speaker lead sockets(right and left channels) from the Audio Output P.C.B. and 2P stereo indicator lead socket from the Radio P.C.B.

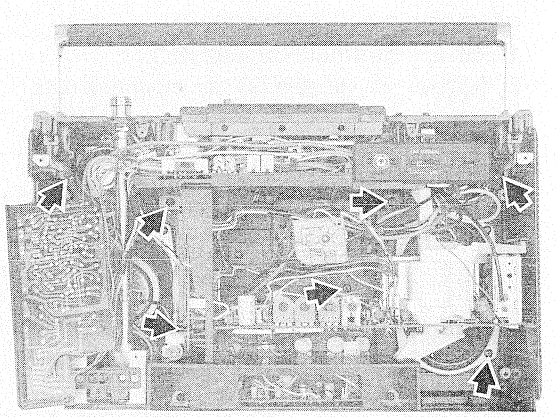


Figure 5

Now the blocks excluding the Amp P.C.B., the Switch P.C.B.(two places) and the cassette tape recorder section can be removed and inspected.

NOTE:

When you have removed the Cabinet Back and the Cabinet Front, do not take Handle and lift the model up or subject it to a sudden shock.

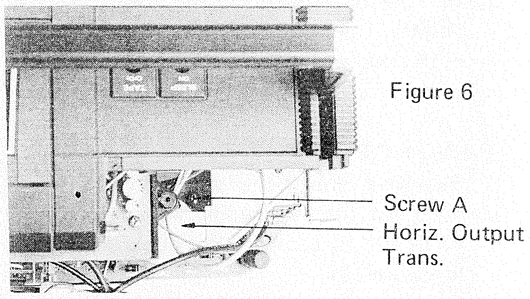


Figure 6

TV P.C.B. REMOVAL

1. Remove the Antenna Terminal Board first.
2. Take out 2P Amp P.C.B. socket(under the Tape Select Switch).
3. Remove a screw(A) near Horiz. Output Transformer of the TV P.C.B.(Refer to Figure 6)
4. As in Figure 7, lift up the TV P.C.B. slightly and pull it so that it is drawn to the Horiz. Output Transformer side.
5. Take out 4P socket from Control P.C.B. and remove TV P.C.B.

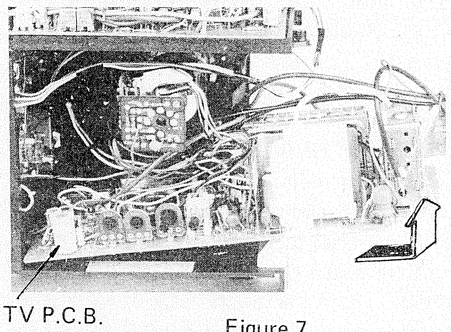


Figure 7

PICTURE TUBE REMOVAL

1. Remove the anode cap and the picture tube socket. Then slightly loosen the screw securing the Deflection Yoke.
2. Remove three screws(B) and remove the Picture Tube Mounting Base. (Refer to Figure 8)
3. Pull the Picture Tube toward you.

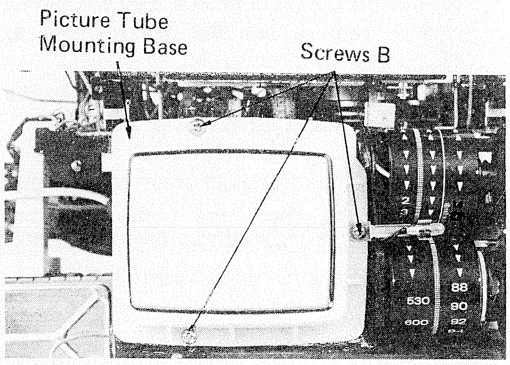


Figure 8

CONTROL P.C.B. REMOVAL

1 Pull out the Audio Output P.C.B.

2 Remove six variable resistor mounting nuts, press in until the variable resistor shafts can be taken out and then remove the Control P.C.B. from the Audio Output P.C.B. side. (Refer to Figure 9)

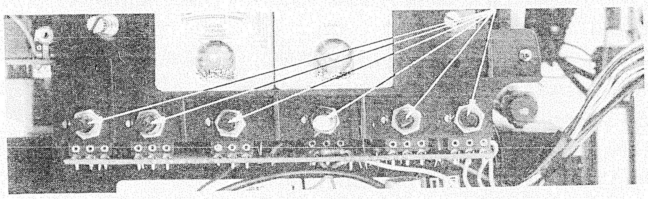


Figure 9

METER REMOVAL

1 As illustrated in Figure 7, pull the TV P.C.B. out slightly.

2 Insert a screwdriver or similar object into the meter lead extension hole section from the TV P.C.B. side, and the meter can be removed when the screwdriver is pushed firmly. (Refer to Figure 10)

3 Detach the solder on the meter leads (2 points). Take care with the colors(polarities) of the lead wires.

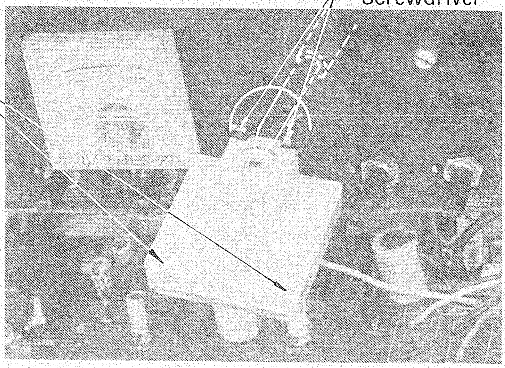


Figure 10

RADIO P.C.B. REMOVAL

1 Remove a screw(C). (Refer to Figure 11)

2 Take out the TV Tuning Knob so that the Radio P.C.B. can be taken out easily. (Refer to Figure 12)

3 Remove four screws(D). (Refer to Figure 12)

4 Take out 1P plug, 5P socket and 1P socket of the Radio P.C.B. (Refer to Figure 11)

5 Pull the Radio P.C.B. to the front. (Refer to Figure 12) This P.C.B. can be removed with the radio chassis and indicator drum, etc. still attached.

6 Rotate the Radio Tuning Knob in the direction of the lower frequency and keep it at the lowest position. As in Figure 13, align the White Dot(top) on the indicator drum with the Chassis Dowel.

7 Remove four screws(E) at the parts mounting side of the Radio P.C.B. (Refer to Figure 14)

8 If the pulley tab is interlocked with the cut-out on the radio chassis, you will not be able to remove the dial string. (Refer to Figure 15)

9 The Radio P.C.B. can be removed when the center pulley screw(F) is removed.

NOTE:

Before mounting the pulley on the variable capacitor shaft, check the position of the indicator drum(Figure 13) and also check that the variable capacitor shaft is set to its leftmost position.

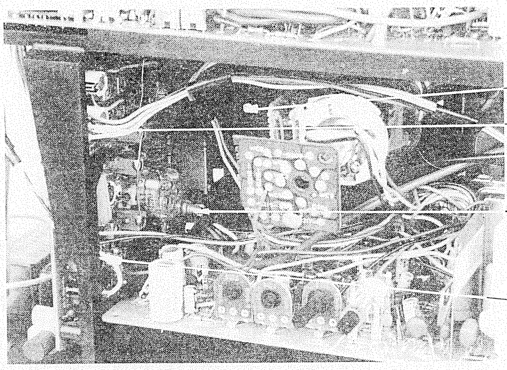


Figure 11

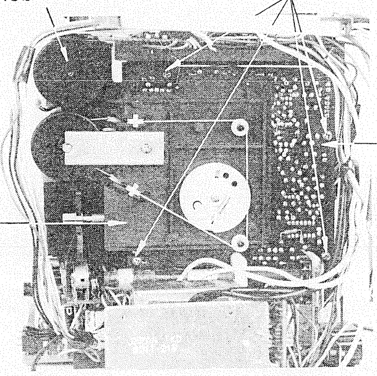


Figure 12

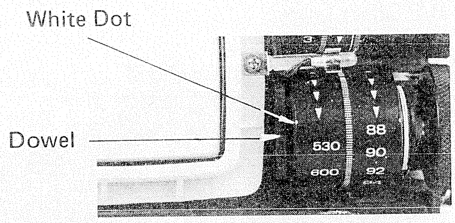

White Dot
Dowel
530
600
88
90
92

Figure 13

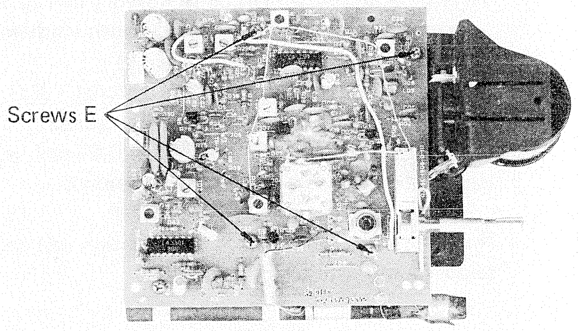


Figure 14

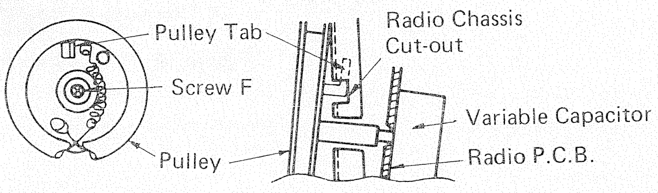

Pulley Tab
Screw F
Pulley
Radio Chassis
Cut-out
Variable Capacitor
Radio P.C.B.

Figure 15

REGULATOR P.C.B. REMOVAL

1 Remove two screws(G) and remove heat sink with Regulator P.C.B. (Refer to Figure 16)
2 Remove screws(H) and (I).

POWER TRANSFORMER REMOVAL

Remove two screws(J).

AC INPUT/EXTERNAL DC SOCKET REMOVAL

Remove two screws (K).

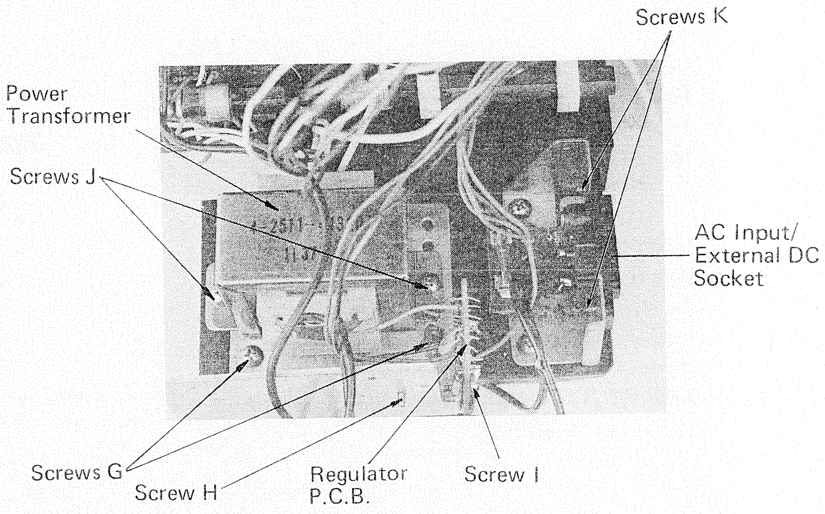

Screws K
Power
Transformer
Screws J
AC Input/
External DC
Socket
Screws G
Screw H
Regulator
P.C.B.
Screw I

Figure 16

TOP CABINET REMOVAL

1 First remove the Cabinet Back, Cabinet Front and Antenna Terminal Board.
2 Take out 2P socket(underneath the tape select switch) of the Amp P.C.B. and 5P socket of the Radio P.C.B.
3 Remove the setscrew(A) for the indicator lamp holder. (Refer to Figure 17)
4 Remove two screws(B) of the Amp P.C.B., pull the Top Cabinet a little toward the Rod Antenna, lift it from chassis frame. (Refer to Figure 18)

Now the Amp P.C.B. and Switch P.C.B. can be removed and inspected.

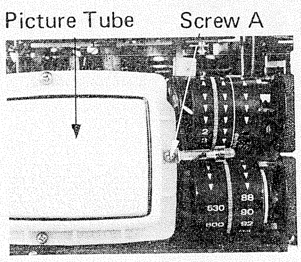

Picture Tube
Screw A

Figure 17

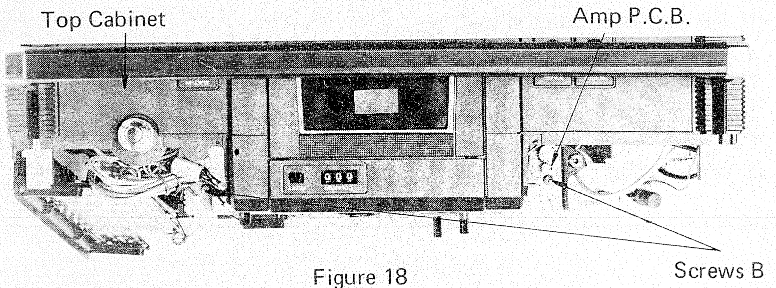

Top Cabinet
Amp P.C.B.
Screws B

Figure 18

AMP P.C.B. AND SWITCH P.C.B. REMOVAL

1 The Amp P.C.B. can be removed when two screws(C) and three screws(D) with washers are removed. (Refer to Figure 19)
2 The Sleep and Tape Select Switches P.C.B. can be removed when the screw(E) is removed and the Mic Switch P.C.B. can be removed when the screw(F) is removed.

Now the cassette tape recorder section can be removed and inspected.

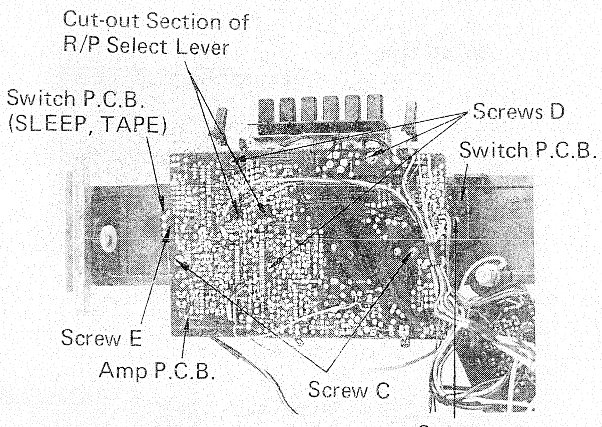

Cut-out Section of
R/P Select Lever
Switch P.C.B.
(SLEEP, TAPE)
Screws D
Switch P.C.B.
Screw E
Amp P.C.B.
Screw C
Screw F

Figure 19

CASSETTE TAPE RECORDER SECTION REMOVAL

When three screws(G) and the screw(H) are removed, the cassette tape recorder section can be removed from the Top Cabinet.

NOTE:
When mounting this section onto the Amp P.C.B., check that the Record/Playback select lever is interlocked properly with the cut-out section of the Record/Playback switches on the Amp P.C.B. using the adjustment holes. (Refer to Figures 19 and 20)

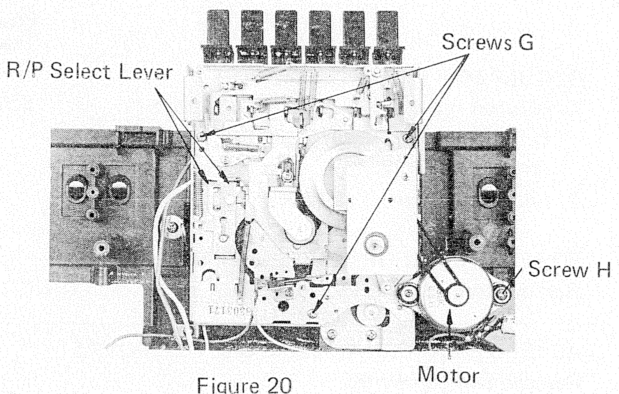

R/P Select Lever
Screws G
Screw H
Motor

Figure 20

BUILT-IN MIC REMOVAL

1 Detach the solder of the mic leads.
2 Take hold of the Mic with radio pliers and pull it out. (Refer to Figure 21)

MOUNTING THE BUILT-IN MIC

Insert the Mic into the mounting hole on the Cabinet Front, apply plenty of cemedine adhesive around the Mic and anchor it.

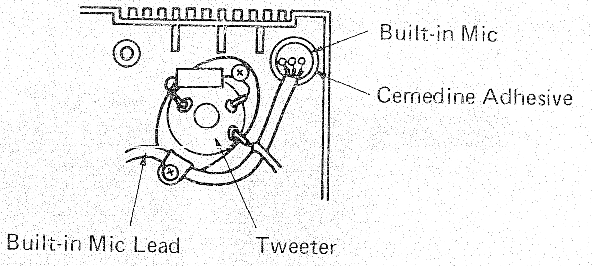

Built-in Mic
Cemedine Adhesive
Built-in Mic Lead
Tweeter

Figure 21

CABINET FRONT ASSEMBLY PROCEDURE AND CHECKPOINTS (Refer to Figure 22)

1 Push the Audio Output P.C.B. in fully until it touches rail A.
2 Place section(B) of the top cabinet fixture slightly on rail B of the cabinet front.
3 Push the Cabinet Front in slightly, and place section(C) of TV P.C.B. on guide C of the cabinet front.
4 Check that the Audio Output P.C.B. does not protrude outside the Cabinet Front and push the Cabinet Front a little at a time.

Take care with the positioning of the lead wires(in particular, those of the speakers, mic and stereo indicator). Also check that the positions of the holes of the front knobs and the centers of the knobs tally correctly.

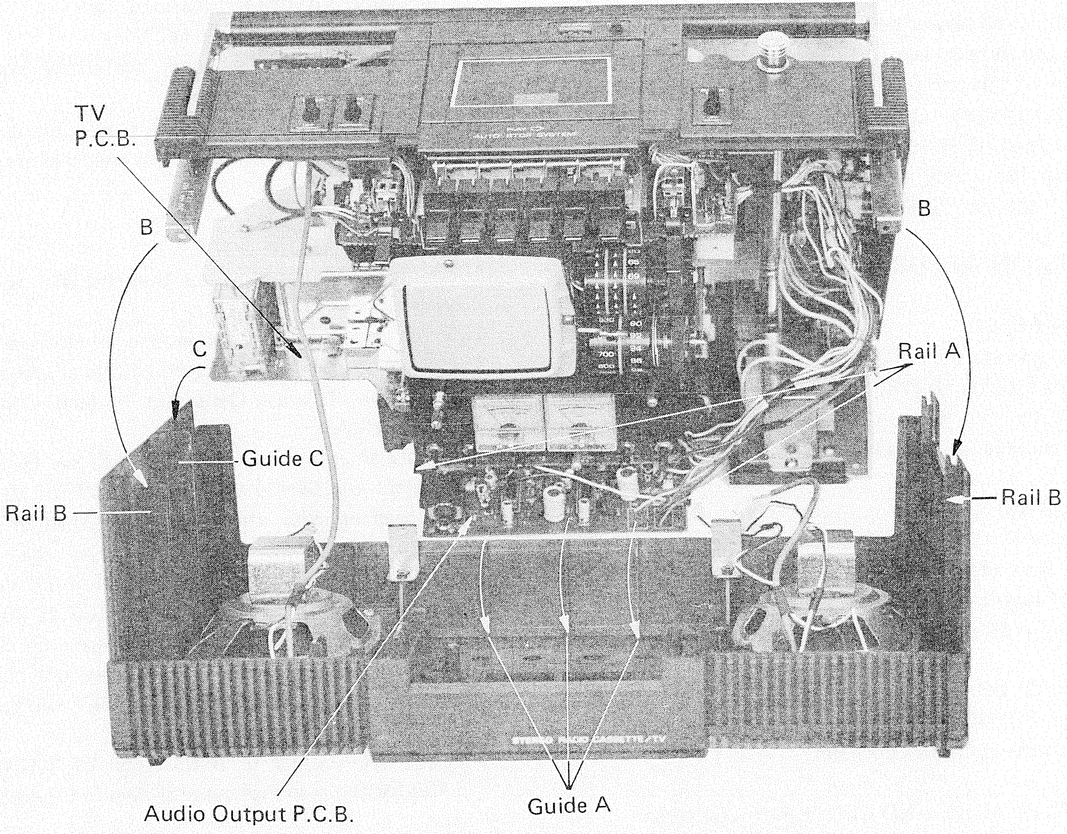


Figure 22

IMPORTANT NOTICE FOR SERVICE PERSONNEL BEFORE SERVICING

PLEASE READ BEFORE ATTEMPTING SERVICE

1 The AC power line voltage must be kept within ±10% of the rated voltage.
2 DO NOT DISCHARGE, ARC, OR MEASURE HIGH VOLTAGE WHEN HIGH VOLTAGE LEAD IS CONNECTED TO CRT. DISCHARGE 2ND ANODE OF CRT ONLY AFTER HIGH VOLTAGE LEAD HAS BEEN DISCONNECTED. DO NOT DISCHARGE HIGH VOLTAGE LEAD AT ANY TIME, DAMAGE TO TRANSISTORS MAY RESULT.
3 While the receiver is in operation, do not attempt to connect or disconnect any wires.
4 Disconnect all power before attempting any repairs.
5 When the power is on, do not attempt to short any portion of the circuit. This shorting may cause damage to the transistors in the receiver.
6 When adjusting Horizontal Oscillator Frequency, do not vary this frequency more than ±800 Hz from 15,625 Hz center frequency: 800 Hz equals 16 bars.

TELEVISION ADJUSTMENT

PRELIMINARIES

1 Do not operate the Tape Recorder.
2 Connect a tester to WB2 or TP-91 and adjust the voltage to 6±0.1V DC with VR701(inside the Amp P.C.B.). (Refer to page 18, Amp P.C.B. top view.)

PICTURE WIDTH

1 If picture is too wide, cut the jumper wire(J01). This jumper wire may have been opened in some chassis as a result of factory adjustment.
2 If picture is still too wide, cut the jumper wire(J02).

PICTURE FOCUS

Cut jumper wire J03 and/or J04 or re-connect them and set the focus to the optimum position.

DEFLECTION YOKE AND CENTERING RINGS

1 Turn the receiver on and disconnect the antenna.
2 Loosen the Deflection Yoke Clamp, and carefully move the yoke on the neck of the picture tube as far forward as possible. Rotate the yoke until the top and bottom edges of the raster are straight. Tighten the clamp.
3 Center the raster and eliminate shaded corners by rotating the centering rings until the best effect is obtained.

VERTICAL HEIGHT AND LINEARITY

1 Adjust V-Linearity control (VR503) to obtain the best linearity.
2 Adjust Height control (VR502) to obtain proper picture height.
3 Rotate V-Hold control (VR501) completely clockwise or counterclockwise to confirm the picture rolls up or down at both extreme positions.

PICTURE IF ALIGNMENT PROCEDURE

PRELIMINARIES

Alignment is an exacting procedure and should be undertaken only when necessary. The following equipment is required for alignment work.

1 Signal Generator with an output of at least 0.1 volt having frequency range to cover RF, PIF & 5.5MHz.
2 PIF Sweep Generator, with a frequency range covering PIF with a sweep width of at least 10MHz and having an adjustable output of at least 0.1 volt.
3 Vaccum Tube Voltmeter.(VTVM)
4 Cathode Ray Oscilloscope, preferably with a voltage calibrator.
5 Allow at least 15 minutes for equipment to warm up unless solid state equipment is used before alignment is attempted.

ALIGNMENT PROCEDURE

1 Set the TV Band Select Switch(SW0) to the V-high position.
2 Short across the base and emitter of Q501 and Q601.
3 Couple loosely the hot lead of Signal Generator to the insulation of Sweep Generator hot lead. Connect ground lead to chassis.
4 Supply an external AGC voltage (0 - 3 V DC) to TP-14.
5 Connect the Sweep Generator to TP of VHF Tuner(at the speaker side), the Oscilloscope through a 10K ohm resistor to TP-16 respectively. Set the oscilloscope sensitivity for adjustment waveform of 0.6 Vp-p.
6 Adjust L102 at 33.4 MHz and L103 at 40.4 MHz for minimum output. If this adjustment can not be performed smoothly, either increase the output of the Sweep Generator or vary the AGC voltage and then adjust.
7 Adjust VHF tuner IF output coil T1, L101, T101 and T102 for the response curve shown in Figure 23.

SOUND IF ALIGNMENT PROCEDURE

1 Set the Signal Generator to 5.5MHz, FM 400Hz ±7.5KHz dev. and Sig. Gen. output 100db.
2 Connect the Signal Generator through 4700pF to TP-12, VTVM to TP-22 respectively.
3 Set the TV Tuning Knob to unused channel.
4 Adjust T302 and T301 for maximum reading on VTVM. If T301 adjustment can not be performed smoothly, try setting the output of the Signal Generator to about 60db.
5 Connect VTVM to TP-23 and adjust T303 for 0V reading on VTVM.
6 Repeat steps 4 and 5.

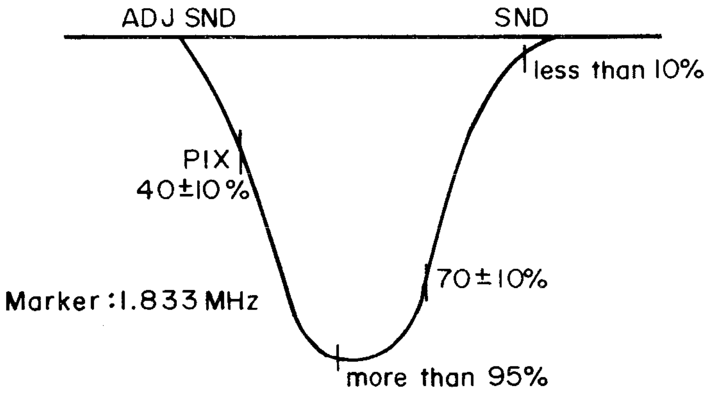
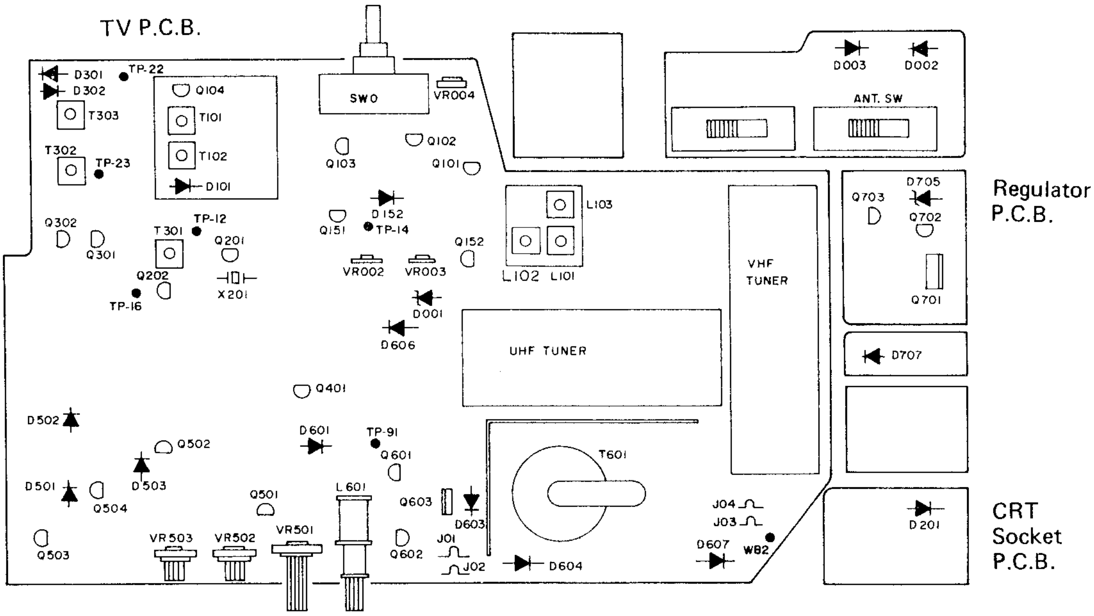
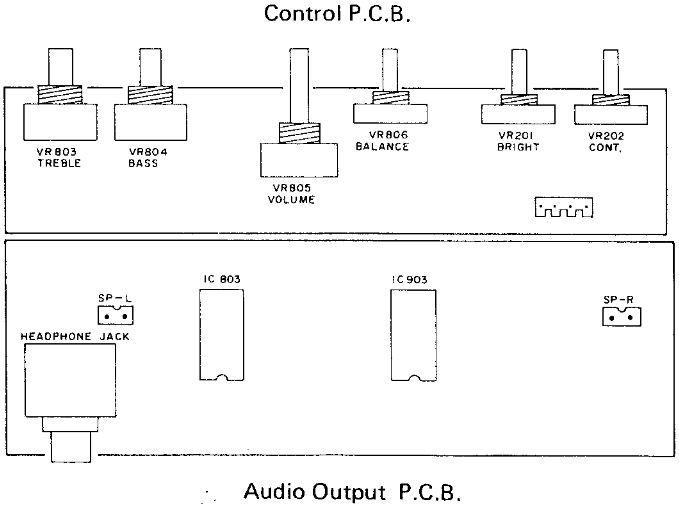


Figure 23

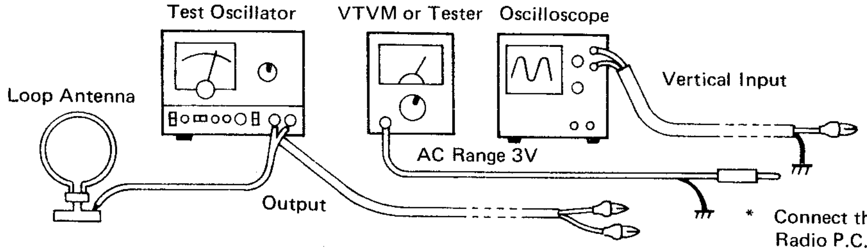
CHASSIS TOP VIEW


Ant. P.C.B.
TV P.C.B.
D301
TP-22
D302
T303
T302
TP-23
Q104
T101
T102
D101
SWO
VR004
Q102
Q103
Q101
D003
D002
ANT. SW
L103
L102
L101
Q703
D705
Q702
Q701
Regulator P.C.B.
Q302
Q301
T301
TP-12
Q201
Q202
X201
TP-16
Q151
D152
TP-14
Q152
VR002
VR003
D001
D606
VHF TUNER
UHF TUNER
D707
Q401
D502
Q502
D601
TP-91
Q601
T601
D501
D503
Q504
Q501
L601
Q603
D603
J04
J03
Q503
VR503
VR502
VR501
Q602
J01
J02
D604
D607
W82
D201
CRT Socket P.C.B.

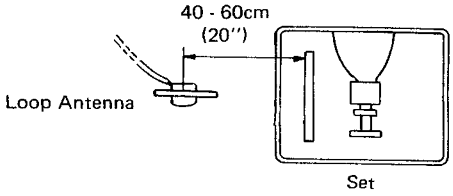

Control P.C.B.
VR803
TREBLE
VR804
BASS
VR805
VOLUME
VR806
BALANCE
VR201
BRIGHT
VR202
CONT.
IC 803
IC 903
SP-L
SP-R
HEADPHONE JACK
Audio Output P.C.B.

AM RADIO ALIGNMENT PROCEDURE

CONNECTION OF THE MEASURING INSTRUMENTS


Test Oscillator
VTVM or Tester
Oscilloscope
Loop Antenna
Vertical Input
AC Range 3V
Output

* Connect this to TP-AM in the Radio P.C.B.


40 - 60cm
(20")
Loop Antenna
Set

* Bring the output cord of the test oscillator close to the Bar Antenna. If the Loop Antenna is used, set it as described left.

PRELIMINARIES

1 Oscilloscope is set to prevent the waveform from saturating and to obtain peak value.
2 Set the VTVM to the 3V, AC range.
3 Modulate the test oscillator at 400Hz and set the degree of modulation to approximately 30% if the modulation degree is variable.

AM IF ADJUSTMENT (460KHz Adjustment)

1 Set the test oscillator to 460KHz.
2 Adjust the cores of IFT, RT02, RT03 and RT04 for maximum reading on VTVM. (Repeat the adjustment two or three times.)
* Keep the output of the test oscillator as low as possible. Check to see that the waveform is not saturated by using the oscilloscope.

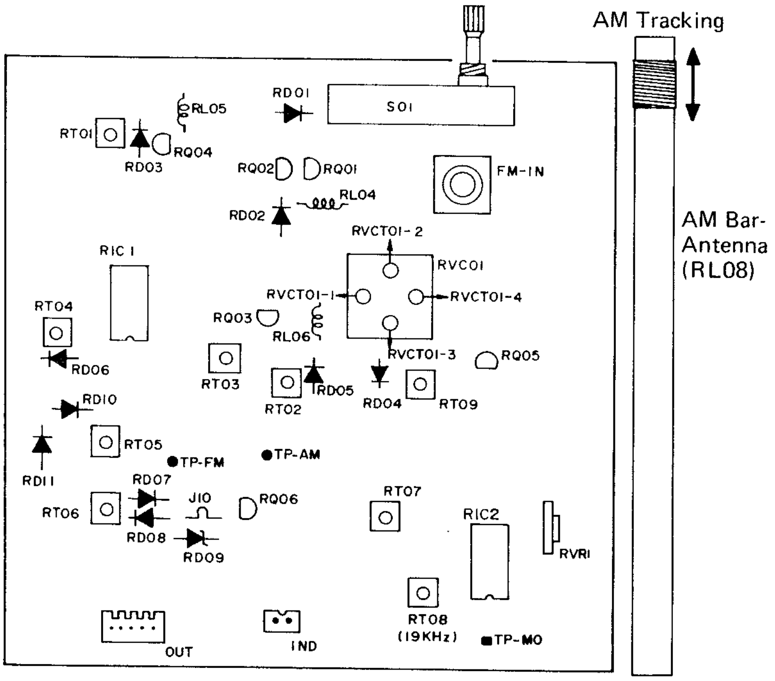
AM FREQUENCY RANGE ADJUSTMENT
(Adjustment to cover 530KHz - 1605KHz)

1 Set the test oscillator to 505KHz.
2 Turn the Radio Tuning Knob to the lower frequency(Tuning Capacitor plates fully meshed).
3 Adjust the core of RT09 for maximum oscilloscope waveform and VTVM indication.
4 Set the test oscillator to 1650KHz.
5 Turn the Radio Tuning Knob to the highest frequency (Tuning Capacitor plates fully open).
6 Adjust the trimmer capacitor(RVCT01-3) of the variable capacitor for maximum oscilloscope waveform and VTVM indication.

AM TRACKING ADJUSTMENT

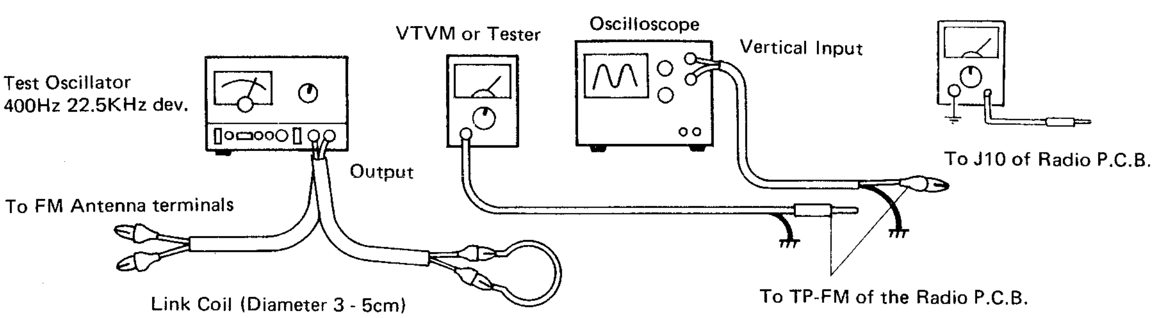
1 Remove the paraffin fastening the coil of the bar antenna(RL08), so that the coil can be moved.
2 Set the test oscillator and the Radio Dial to 600KHz.
3 Move the coil of the bar antenna for maximum oscilloscope waveform and VTVM indication.
* After adjustment, fasten the coil with paraffin.
4 Set the test oscillator and the Radio Dial to 1400KHz.
5 Adjust the trimmer capacitor (RVCT01-4) of the variable capacitor for maximum oscilloscope waveform and VTVM indication.
* Repeat the AM frequency range and AM tracking adjustments two or three times.

RADIO CHASSIS TOP VIEW


AM Tracking
AM Bar-Antenna (RL08)
RD01
S01
RL05
RT01
RD03
RQ04
RQ02
RQ01
FM-IN
RL04
RD02
RVCT01-2
RIC 1
RVC01
RVCT01-1
RVCT01-4
RT04
RQ03
RL06
RVCT01-3
RQ05
RD06
RT03
RD05
RD04
RT09
RT02
RD10
RT05
TP-FM
TP-AM
RD11
RD07
RT07
RT06
J10
RQ06
RIC2
RD08
RD09
RVR1
RT08
(19KHz)
TP-MO
OUT
IND

FM RADIO ALIGNMENT PROCEDURE

CONNECTION OF THE MEASURING INSTRUMENTS



PRELIMINARIES

1 Set the VTVM to about 3V, AC and the ammeter (tester) to 200μA, DC.

2 Make a link coil of diameter 3 - 5cm(2") as illustrated for the test oscillator output and set it on RL05 when FM IF adjustments are performed. Connect the oscillator output to the FM antenna terminals for some other adjustments.

FM IF ADJUSTMENT (10.7MHz Adjustment)

1 Set the link coil on RL05.

2 Set the test oscillator to 10.7MHz and adjust IFT RT05 for maximum on the ammeter(tester).

3 Minimize the test oscillator output as much as possible and adjust IFT RT01, RT05 and RL05 for maximum on the ammeter(tester).
  * Repeat the adjustment two or three times.

4 Adjust IFT RT06 for maximum on the VTVM.

5 Check to see that the indications of VTVM and ammeter(tester) are identical. If not, repeat steps 2 - 4.

FM FREQUENCY RANGE ADJUSTMENT

(Adjustment to cover 87.5MHz - 108MHz)

1 Set the test oscillator to 87.5MHz and connect it to the FM terminals.

2 Turn the Radio Tuning Knob to the lower frequency (Tuning Capacitor plates fully meshed).

3 Adjust RL06 for maximum indication on the oscilloscope and VTVM.
  * After adjustment, secure RL06 with paraffin.

4 Set the test oscillator to 108.0MHz and turn the Radio Tuning Knob to the higher frequency (Tuning Capacitor plates fully open).

5 Adjust the trimmer capacitor RVCT01-1 on the variable capacitor for maximum indication on the oscilloscope and VTVM.

FM TRACKING ADJUSTMENT

1 Set the test oscillator to 90.0MHz and connect the output to the FM antenna terminals.

2 Set the Radio Dial to 90.0MHz and adjust RL04 for maximum.
  * After adjustment, secure RL04 with paraffin.

3 Set the test oscillator and the Radio Dial to 105.0MHz.

4 Adjust the trimmer capacitor RVCT01-2 of the variable capacitor for maximum oscilloscope waveform and VTVM indication.

* Repeat the FM Frequency range and FM tracking adjustments two or three times.

FM STEREO SEPARATION

(Simple adjustment method)

1 Set RVR1 to the mid-position.

2 Connect the FM stereo generator to FM antenna terminals.

3 Set the knobs of FM stereo generator to the following positions:

Mode selector. . . . . .L+R
Level(output) . . . . .22.5KHz frequency dev.
Pilot signal (19KHz) switch . . .ON
Output frequency . . . . .frequency not affected by broadcasts

4 First, connect the oscillosocpe to pin (1) of RIC2, and adjust RT07 for maximum output on oscilloscope. If the waveforms are too small and are difficult to adjust, increase the output level slightly but try to adjust in the vicinity of a 22.5KHz frequency deviation.

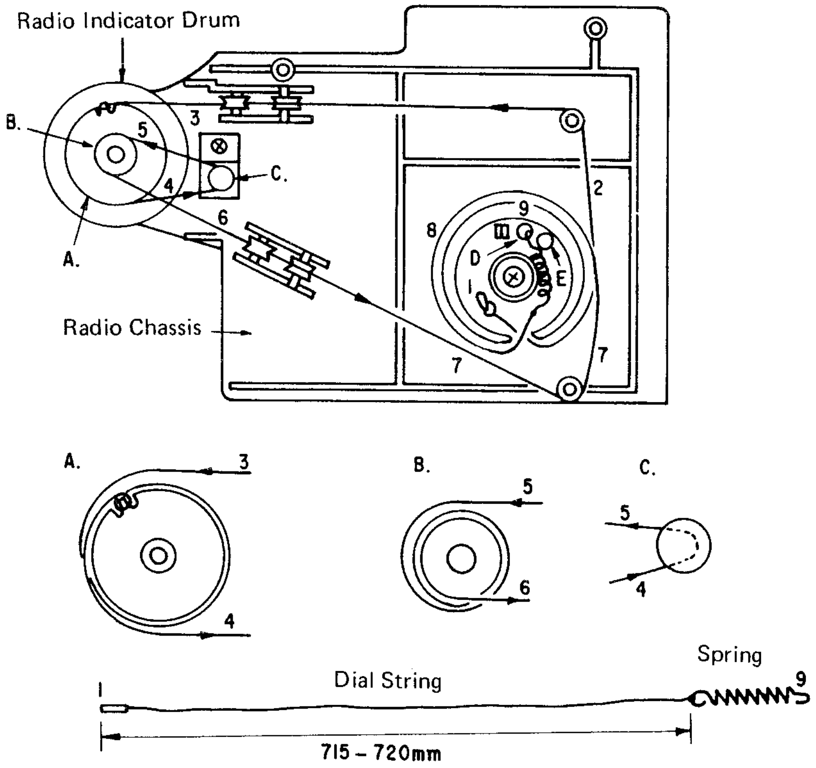
5 Now connect the oscilloscope to pin (13) of RIC2, and adjust RT08 for maximum output on oscilloscope.

6 Set the Mode Selector on the FM stereo generator to R, adjust RVR1 for minimum indication on the model's left channel level meter.

7 Set the Mode Selector on the FM stereo generator to L, and adjust RVR1 for minimum indication on the right channel level meter.

8 If the positions of RVR1 under steps 6 and 7 differ greatly, re-adjust from step 1.

RADIO DIAL STRINGING AND DIAL ADJUSTMENT


Radio Indicator Drum
B.
5
3
C.
4
6
A.
Radio Chassis
2
8
9
D
E
1
7
7
A.
3
4
B.
5
6
C.
5
4
Spring
Dial String
1
9
715 – 720mm

1. Attach the Dial String in order from (1) to (9).
2. After the string has been attached, try rotating the Radio Tuning Knob and check that the knob moves smoothly.
3. Rotate the Radio Tuning Knob fully in the direction of the low frequency, and rotate the Indicator Drum until the chassis Dowel and the White Dot(top) of the indicator drum are aligned. (Refer to page 7, Figure 13.)

NOTE:

The tension of the Dial String can be adjusted at holes (D) and (E) of the pulley to which the spring is attached.

TAPE RECORDER MECHANICAL ADJUSTMENT

PRELIMINARY

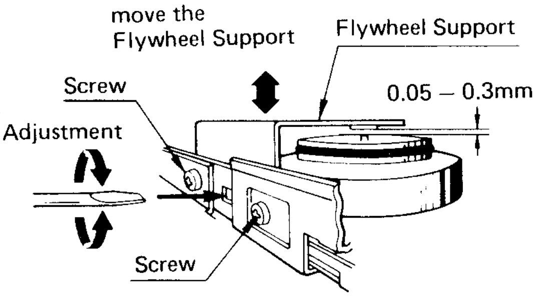
Clean the surfaces which come into contact with the tape(i.e. R/P, Erase Heads, Sensor, Pinch Roller and Capstan) as well as the surfaces of the drive sections (i.e. Moter Pulley, Take-up Pulley, Roller Drive, Take-up Reel, Flywheel, Supply Reel, Idler and Rewind Roller) with a soft cloth soaked in alcohol.

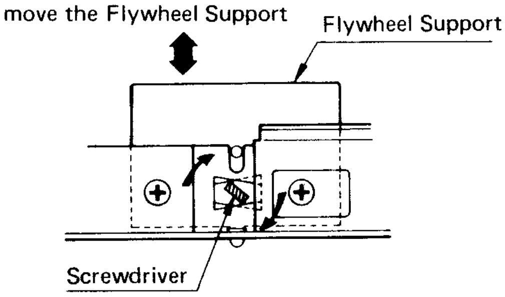
Trouble may occur because of oil and grease stains. Do not clean the Driving Belt with alcohol-soaked fabric because it is specially surface-treated. Replace the Belt with a new one if it is stained with grease or oil.

FLYWHEEL SUPPORT

1 The clearance between the Flywheel Support and the Flywheel should be 0.05 - 0.3mm with the Chassis upside down.

2 If necessary, loosen the two fastening screws and insert a screwdriver into the adjusting hole as illustrated.
Then, adjust the flywheel support position by turning it as illustrated.

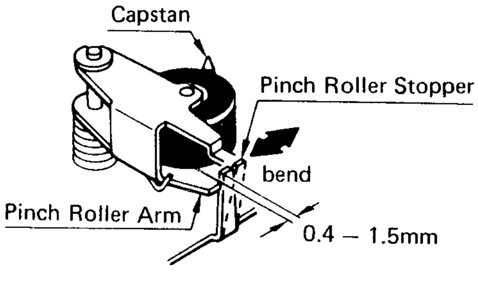

move the Flywheel Support
Flywheel Support
Screw
0.05 – 0.3mm
Adjustment
Screw


move the Flywheel Support
Flywheel Support
Screwdriver

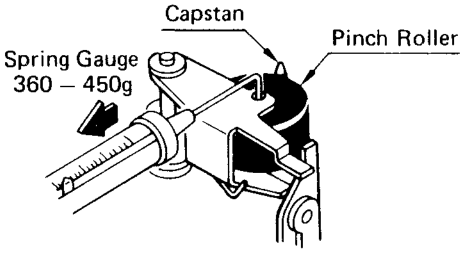
3 After the adjustment, tighten the screws and secure them with paint or glue.

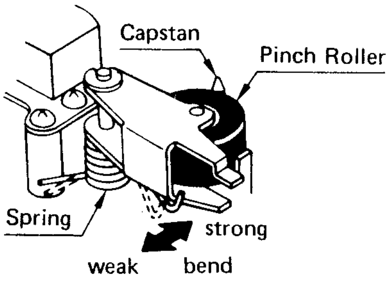
PINCH ROLLER

1 The clearance between the Pinch Roller Arm and the Pinch Roller Stopper should be 0.4 - 1.5mm with the unit in the playback mode.
  - * If necessary, adjust the clearance by bending the Pinch Roller Stopper as illustrated.


Capstan
Pinch Roller Stopper
bend
Pinch Roller Arm
0.4 – 1.5mm

2 Measure the pinch roller pressure with a spring gauge (500g) in the playback mode by the following procedure.
  - * Hook the spring gauge to the Pinch Roller and pull it away from the Capstan. Measure the pressure the moment the Pinch Roller comes in contact with the Capstan and the Pinch Roller starts rotating. It should be 360 - 450g.
  - * If necessary, adjust the pressure by bending the Spring or replace it with a new one.


Capstan
Pinch Roller
Spring Gauge
360 – 450g

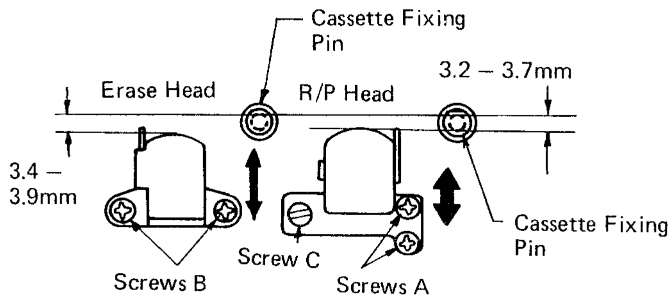

Capstan
Pinch Roller
Spring
strong
weak
bend

HEAD POSITIONS

If the Heads has been replaced or disassembled, adjust the head positions.

With the unit in the playback mode, loosen screws (A) and (B), move the heads in the direction as illustrated and adjust the Heads to the specified values.

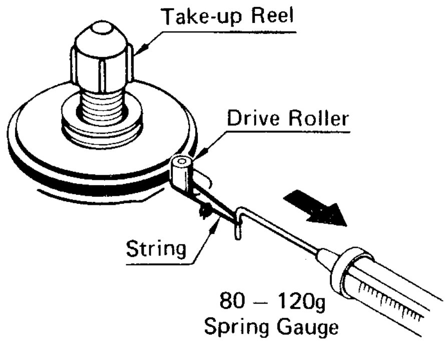
Finally, adjust the head azimuth, screw (C), and lock the screw to secure it.

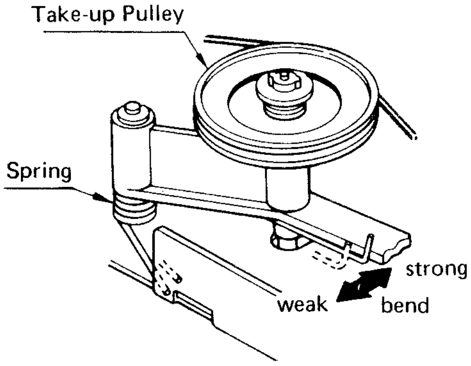

Cassette Fixing Pin
3.2 – 3.7mm
Erase Head
R/P Head
3.4 – 3.9mm
Cassette Fixing Pin
Screw C
Screws B
Screws A

TAKE-UP TORQUE

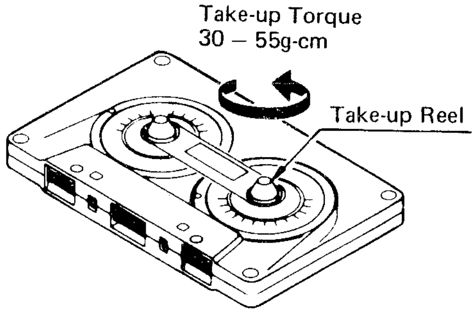
The Take-up torque of 30 - 55g-cm is needed at the drive roller of 80 - 120g for proper performance.

1 Set the unit in the playback mode and measure the drive roller pressure with the same procedure as in the pinch roller pressure measurement. It should be 80 - 120g.
 * If necessary, adjust the pressure by bending the Spring or replace it with a new one as illustrated.

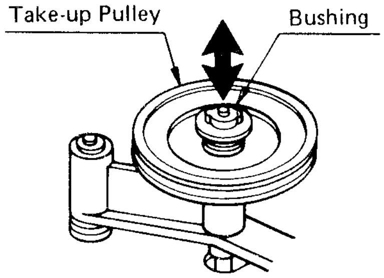

Take-up Reel
Drive Roller
String
80 – 120g
Spring Gauge


Take-up Pulley
Spring
strong
weak
bend

2 Measure the torque of the take-up Reel with a torque gauge in the playback mode. It should be 30 - 55g.
 * If necessary, adjust the torque by moving the Bushing up and down as illustrated.

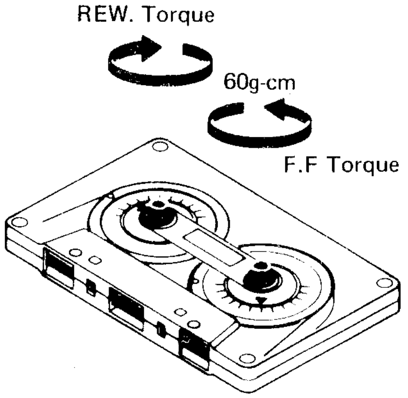

Take-up Torque
30 – 55g-cm
Take-up Reel

Cassette type Torque Meter


Take-up Pulley
Bushing

FAST-FORWARD / REWIND TORQUES

1 The fast-forward and rewind torque value should be more than 60g-cm as shown.


REW. Torque
60g-cm
F.F Torque

Cassette Type Torque Meter

2 If the fast-forward torque value is less than 60g-cm, replace the Take-up Reel or the Idler Roller with a new one.

3 If the rewind torque value is less than 60g-cm, replace the Supply Reel, the Idler Roller or the Rewind Roller.

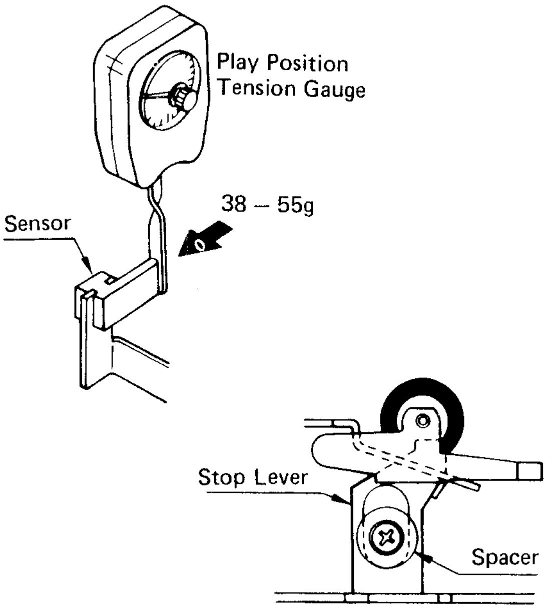
NOTE:

The full scale should be 160g-cm when the cassette-type torque meter is used.

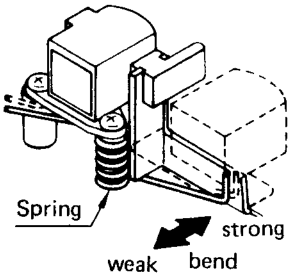
AUTO SHUT-OFF

The auto shut-off mechanism automatically switches off the unit at the end of the tape in playback or recording operation.

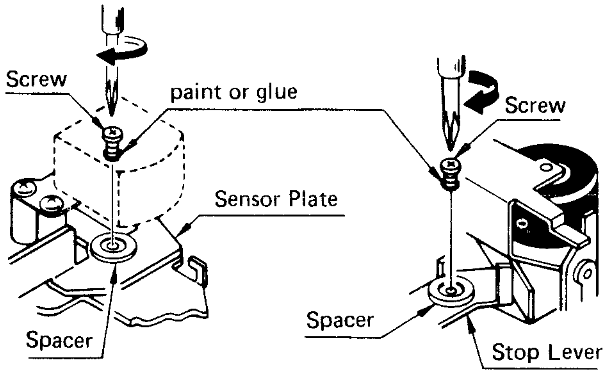
1 Set the unit in the playback mode. Then, apply a tension gauge to the Sensor as illustrated.
Push the sensor with the tension gauge in the indicated direction and measure the sensor pressure when the hole of Stop Lever overlaps with the Spacer as illustrated. It should be 38 - 55g.


Play Position
Tension Gauge
38 – 55g
Sensor
Stop Lever
Spacer

* If the pressure is less than 30g, adjust the pressure by bending the Spring or replace it with a new one as illustrated.


Spring
strong
weak
bend

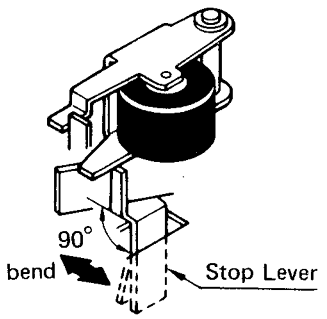
2 If the pressure is more than 55g, check or adjust the mechanism in the following A, B, C order:
   A. Check the looseness of the fastening screw on the Sensor Plate and the Stop Lever.
      * If the screws are loose, apply paint or glue to the Threads of the screws before tightening them.


Screw
paint or glue
Screw
Sensor Plate
Spacer
Spacer
Stop Lever

NOTE:
The R/P Head has to be removed in order to tighten the sensor plate screw.

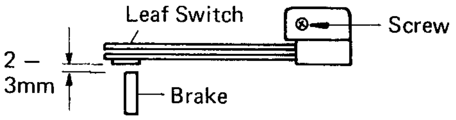
   B. Wipe out grease and oil on the area between the Slide Base and the Sensor Plate, the Slide Base and the Stop Lever if necessary.
   C. Adjust the sensor pressure by bending the Spring to decrease its force or replace it with a new one.

3 The curved piece of the Stop Lever should be bent to 90°.
   * If not, bend it at proper angles as illustrated.


90°
bend
Stop Lever

LEAF SWITCH POSITION

The Leaf Switch must go off when the stop button is depressed, and on when the playback, recording, fast-forward and rewind buttons are depressed.
To adjust the position at OFF, loosen the screw and set to 2 - 3mm. Lock the screw after adjustment.


Leaf Switch
Screw
2 –
3mm
Brake

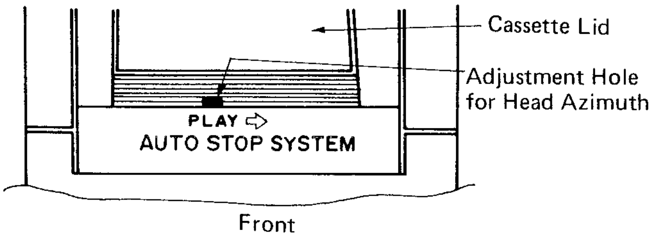
TAPE RECORDER ELECTRICAL ADJUSTMENT

HEAD AZIMUTH

1 Connect VTVM to DIN OUT.

2 Play back a 6.3KHz or 8.0KHz test tape (Example: TEAC MTT-113B or MTT-113C).

3 Insert the adjustment rod (slot type) and adjust the head azimuth so that the indication on VTVM is brought to its maximum.
Repeat the same adjustment for the two channels with the tape reversed and check the indications.


Cassette Lid
Adjustment Hole for Head Azimuth
PLAY ⇨
AUTO STOP SYSTEM
Front

PLAYBACK GAIN

1 Confirm the head azimuth before adjustment and connect VTVM to DIN OUT.

2 Play back a 1KHz test tape (Example: TEAC MTT-112B).

3 Adjust VR801 so that the level of the left channel DIN OUT is identical to that of the right channel DIN OUT.

BIAS CURRENT AND BIAS TRAP

1 Knob settings
Tape Recorder . . . . .recording mode (loard the cassette tape, depress the REC, PLAY, PAUSE buttons)
Beat Cancel Switch(SW10) . .position 1 (center)
Tape Select Switch(SW6) . . .normal

2 Connect VTVM to TP-L(+) and Chassis(−), and adjust L802 for the maximum indication. Now adjust the indication to 5mV with VR807. Perform this adjustment at least twice.

3 Change the connections of VTVM to TP-R(+) and Chassis(−), and adjust L902 and VR907 as same as adjustment under step 2.

4 Finally, change the Tape Select Switch setting to CrO2 and check that the indication on VTVM is within 6 to 8mV.

TAPE SPEED

1 Connect a frequency counter to the left or right channel DIN OUT.

2 Play back a 3KHz test tape (Example: TEAC MTT-111).

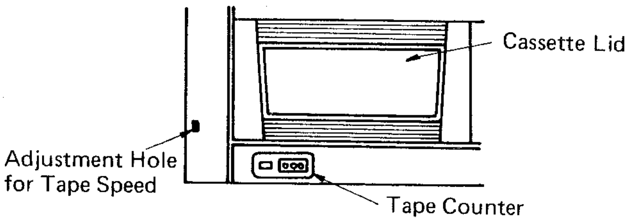
3 Insert the adjustment rod (slot type) and adjust for an indication on the frequency counter of 3KHz ±1%.

METER GAIN

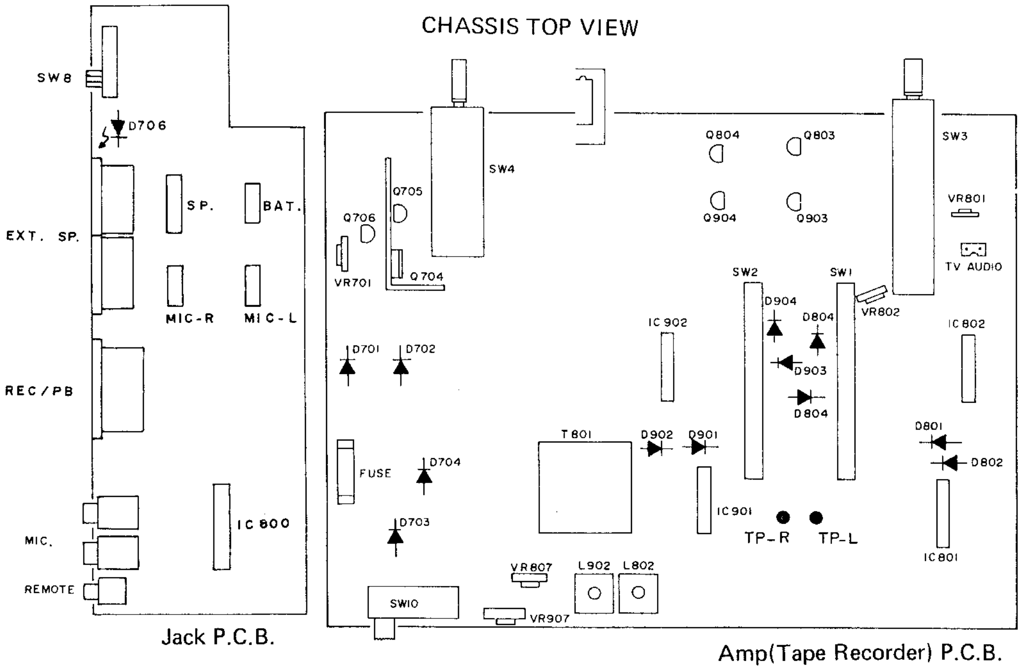
1 Confirm the head azimuth before adjustment and keep the Mode Switch (SW4) at MONO.

2 Play back a 1KHz test tape (Example: TEAC MTT-112B).

3 Adjust VR802 so that the indication on the left channel level meter is exactly the same as that of the right channel level meter.


Cassette Lid
Adjustment Hole for Tape Speed
Tape Counter

CHASSIS TOP VIEW

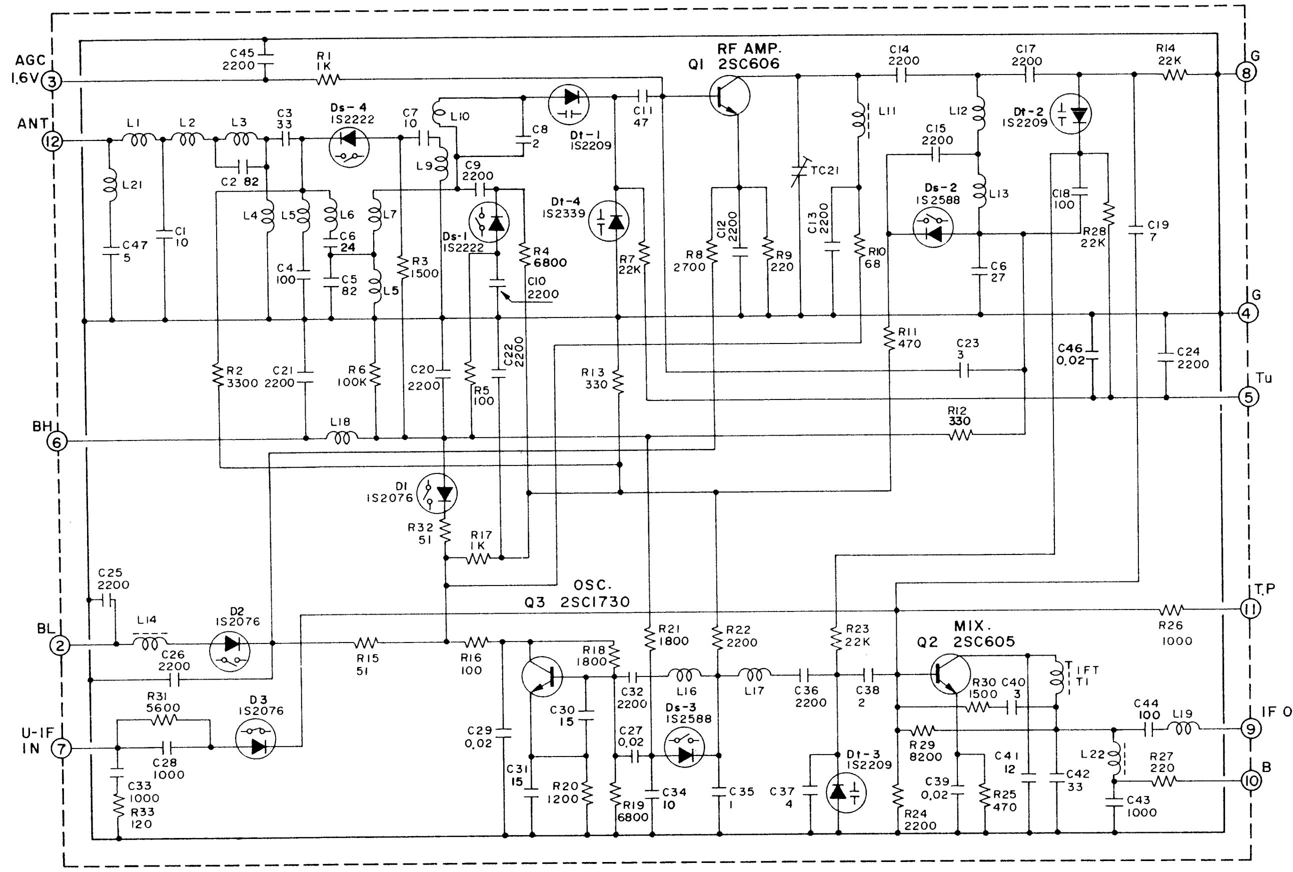

SW8
D706
EXT. SP.
SP.
BAT.
MIC-R
MIC-L
REC/PB
MIC.
REMOTE
IC800
SW4
Q705
Q706
VR701
Q704
D701
D702
FUSE
D704
D703
SW10
VR807
VR907
L902
L802
T801
D902
D901
IC901
TP-R
TP-L
IC902
Q804
Q803
Q904
Q903
SW2
SW1
D904
D804
D903
D804
VR802
SW3
VR801
TV AUDIO
IC802
D801
D802
IC801

Jack P.C.B.

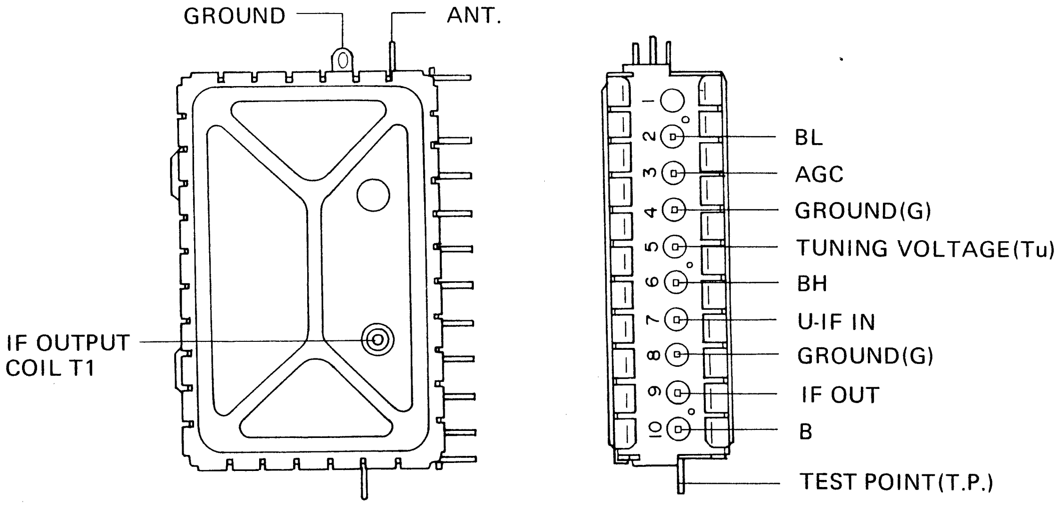
Amp(Tape Recorder) P.C.B.

SCHEMATIC DIAGRAM (VHF TUNER)

VHF TUNER
4-1151-06820



AGC 1.6V ③
ANT ⑫
BH ⑥
BL ②
U-IF IN ⑦
G ⑧
G ④
Tu ⑤
T.P ⑪
IF OUT ⑨
B ⑩
RF AMP. Q1 2SC606
OSC. Q3 2SC1730
MIX. Q2 2SC605
C45 2200
R1 1K
L1
L2
L3
C3 33
C2 82
Ds-4 1S2222
C7 10
L10
C8 2
L9
C9 2200
Dt-1 1S2209
C11 47
Dt-4 1S2339
Ds-1 1S2222
R4 6800
C10 2200
L21
C47 5
C1 10
L4
L5
L6
C6 24
L7
C4 100
C5 82
L5
R3 1500
R7 22K
R8 2700
C12 2200
R9 220
TC21
C13 2200
R10 68
L11
C14 2200
L12
C15 2200
Ds-2 1S2588
L13
C6 27
C17 2200
Dt-2 1S2209
C18 100
R28 22K
R14 22K
C19 7
R2 3300
C21 2200
R6 100K
C20 2200
R5 100
C22 2200
R13 330
R11 470
C23 3
C46 0.02
C24 2200
L18
R12 330
D1 1S2076
R32 51
R17 1K
C25 2200
L14
D2 1S2076
C26 2200
R15 51
R16 100
R18 1800
R21 1800
R22 2200
R23 22K
R26 1000
R31 5600
D3 1S2076
C28 1000
C33 1000
R33 120
C29 0.02
C30 15
C31 15
R20 1200
C32 2200
C27 0.02
L16
Ds-3 1S2588
R19 6800
C34 10
L17
C36 2200
C38 2
C35 1
C37 4
Dt-3 1S2209
IFT T1
R30 1500
C40 3
R29 8200
C39 0.02
R24 2200
C41 12
R25 470
C42 33
L22
C44 100
L19
R27 220
C43 1000

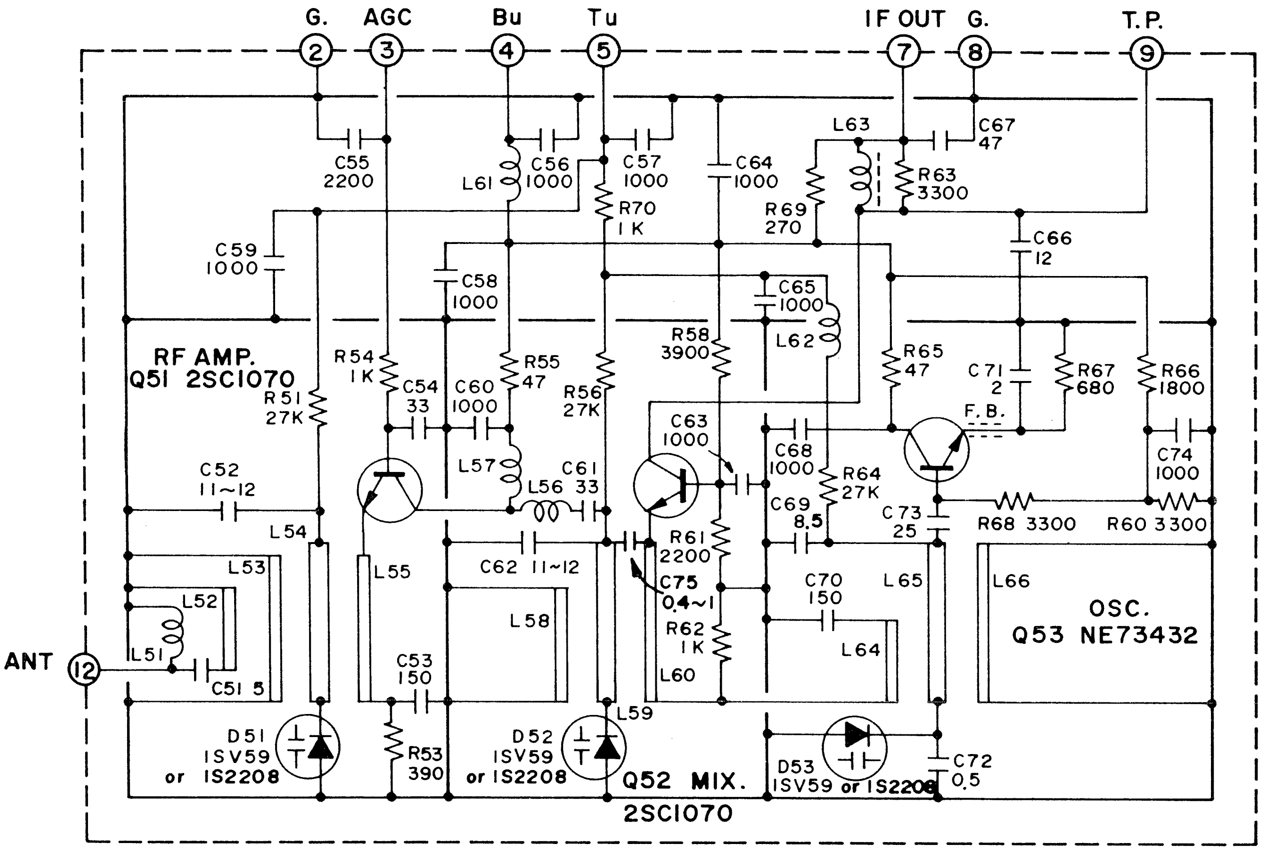


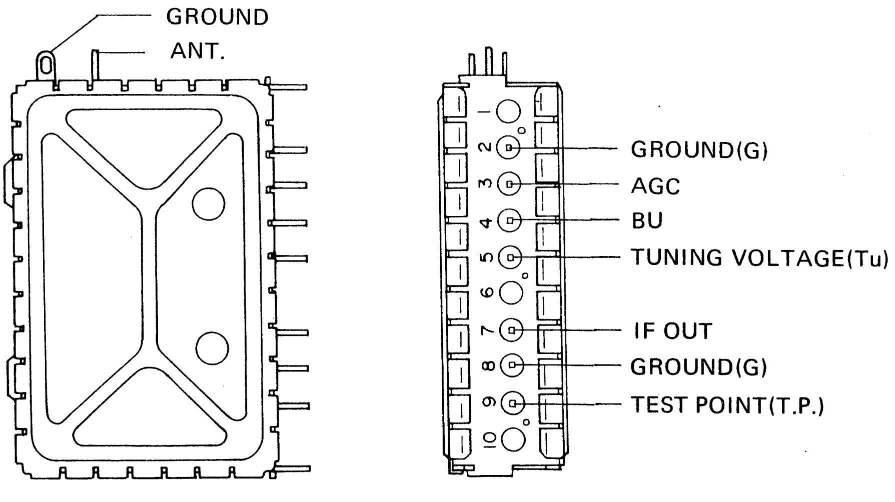
GROUND
ANT.
IF OUTPUT COIL T1
1
2
3
4
5
6
7
8
9
10
BL
AGC
GROUND(G)
TUNING VOLTAGE(Tu)
BH
U-IF IN
GROUND(G)
IF OUT
B
TEST POINT(T.P.)

PICTORIAL OF VHF TUNER

SCHEMATIC DIAGRAM (UHF TUNER)

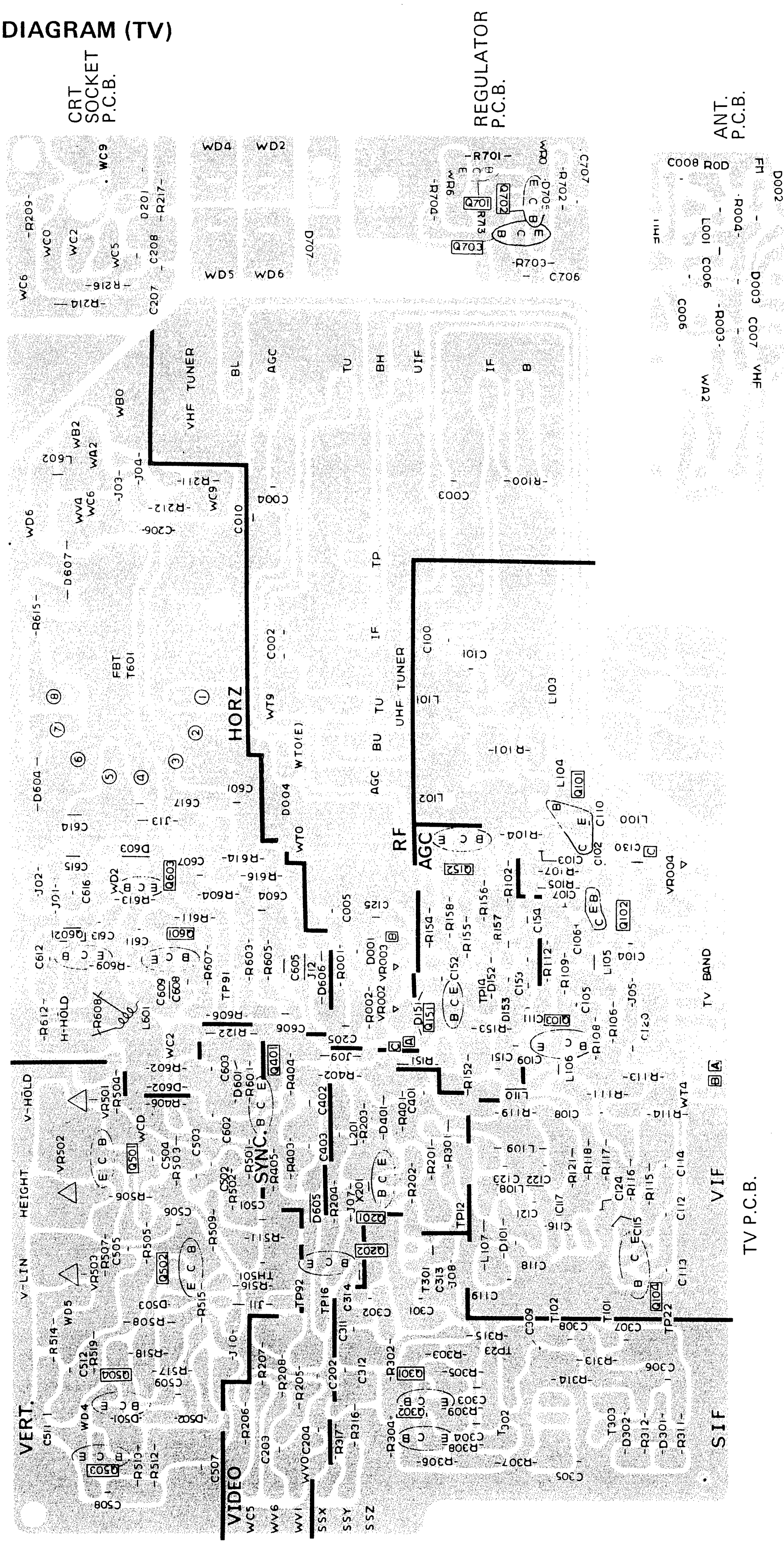
UHF TUNER
4-1151-46320


G. ②
AGC ③
Bu ④
Tu ⑤
IF OUT ⑦
G. ⑧
T.P. ⑨
ANT ⑫
C55 2200
C56 1000
L61
C57 1000
R70 1K
C64 1000
L63
C67 47
R63 3300
R69 270
C66 12
C59 1000
C58 1000
C65 1000
L62
RF AMP.
Q51 2SC1070
R51 27K
R54 1K
C54 33
C60 1000
R55 47
R56 27K
R58 3900
R65 47
C71 2
R67 680
R66 1800
F.B.
C63 1000
C68 1000
R64 27K
C74 1000
C52 11~12
L57
C61 33
L56
C69 8.5
C73 25
R68 3300
R60 3300
L54
L53
L55
C62 11~12
R61 2200
C75 0.4~1
C70 150
L65
L66
OSC.
Q53 NE73432
L52
L58
R62 1K
L64
L51
C51 5
C53 150
L60
L59
D51 1SV59 or 1S2208
R53 390
D52 1SV59 or 1S2208
Q52 MIX. 2SC1070
D53 1SV59 or 1S2208
C72 0.5

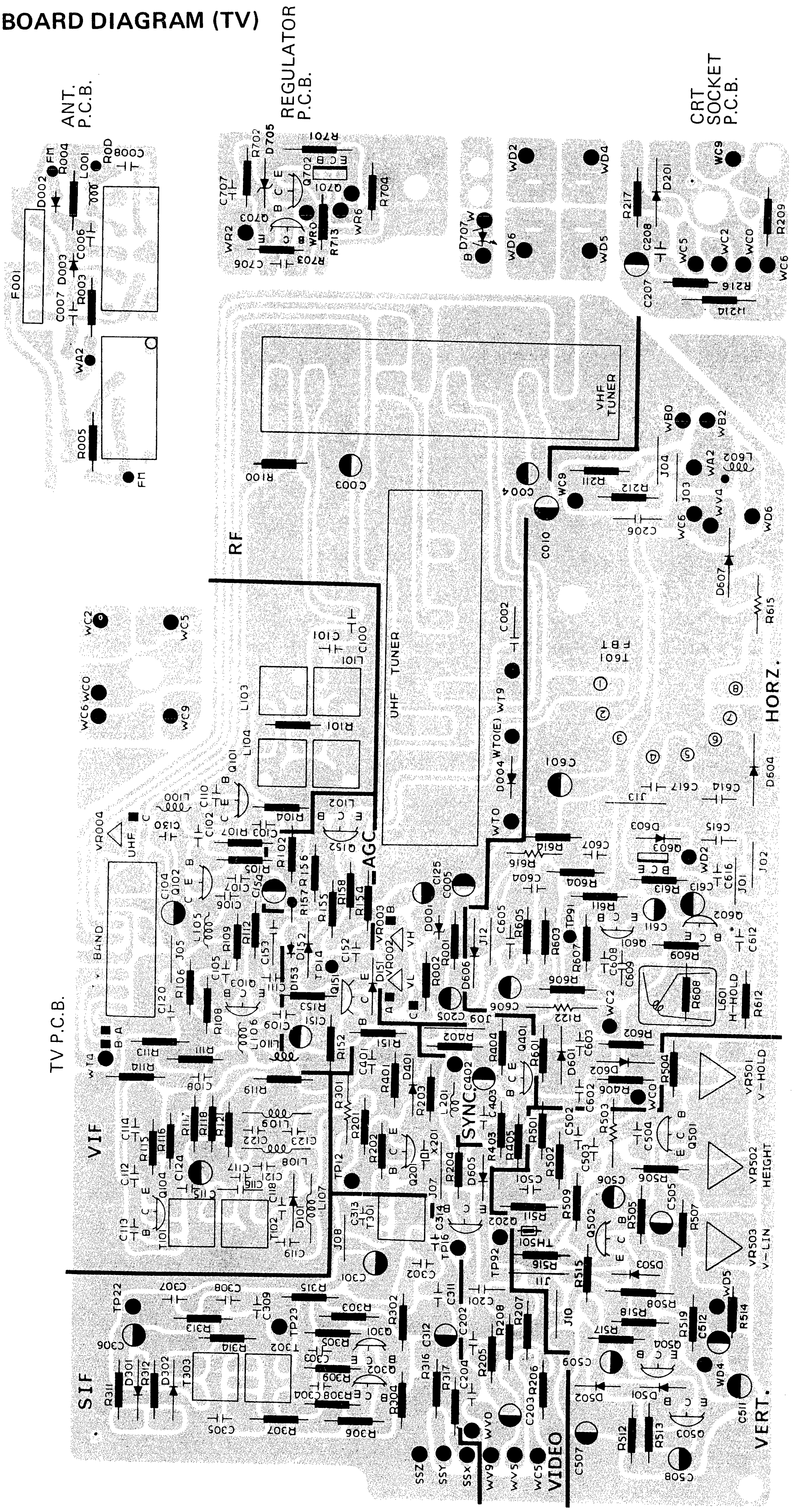

GROUND
ANT.
1
2
3
4
5
6
7
8
9
10
GROUND(G)
AGC
BU
TUNING VOLTAGE(Tu)
IF OUT
GROUND(G)
TEST POINT(T.P.)

PICTORIAL OF UHF TUNER

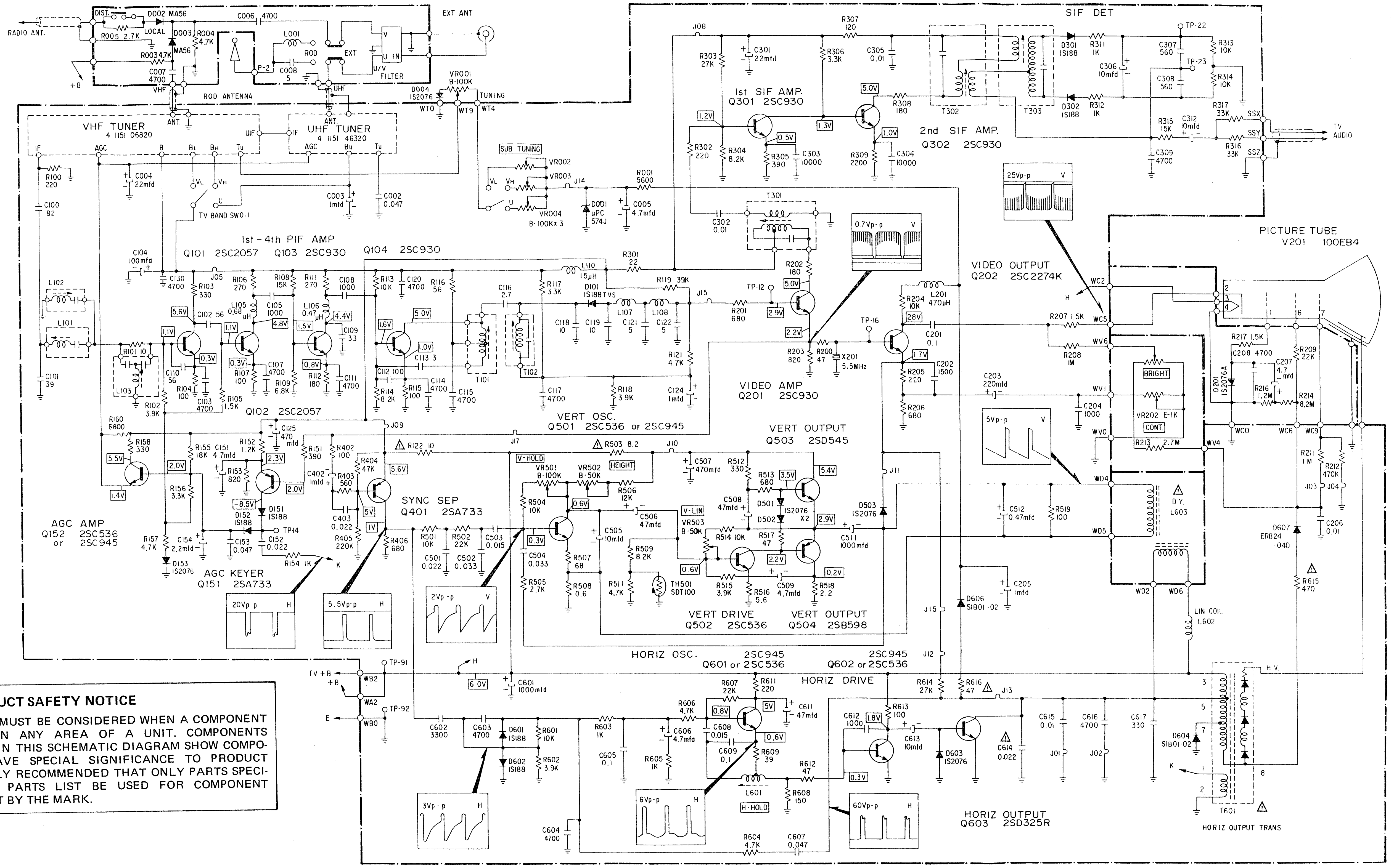
CIRCUIT BOARD DIAGRAM (TV)


CRT SOCKET P.C.B.
REGULATOR P.C.B.
ANT. P.C.B.
TV P.C.B.
VHF TUNER
UHF TUNER
HORZ
RF
AGC
VIF
SIF
SYNC.
VIDEO
VERT.
V-HOLD
HEIGHT
V-LIN
H-HOLD
FBT T601
TV BAND

CIRCUIT BOARD DIAGRAM (TV)


ANT. P.C.B.
REGULATOR P.C.B.
CRT SOCKET P.C.B.
TV P.C.B.
VHF TUNER
UHF TUNER
RF
AGC
VIF
SIF
SYNC
VIDEO
VERT.
HORZ.
FBT
T601
VR501 V-HOLD
VR502 HEIGHT
VR503 V-LIN
L601 H-HOLD
VR004
UHF
BAND
F001
D707
T101
T102
T301
T302
T303

SCHEMATIC DIAGRAM (TV)



RADIO ANT.
EXT ANT
ROD ANTENNA
VHF TUNER
4 1151 06820
UHF TUNER
4 1151 46320
TV BAND SW0-1
SUB TUNING
TUNING
VR001 B-100K
VR004 B-100K x 3
1st-4th PIF AMP
Q101 2SC2057
Q103 2SC930
Q104 2SC930
Q102 2SC2057
AGC AMP
Q152 2SC536 or 2SC945
AGC KEYER
Q151 2SA733
SYNC SEP
Q401 2SA733
SIF DET
1st SIF AMP.
Q301 2SC930
2nd SIF AMP.
Q302 2SC930
TV AUDIO
VIDEO OUTPUT
Q202 2SC2274K
VIDEO AMP
Q201 2SC930
PICTURE TUBE
V201 100EB4
BRIGHT
CONT.
VR202 E-1K
VERT OSC.
Q501 2SC536 or 2SC945
V-HOLD
HEIGHT
V-LIN
VR501 B-100K
VR502 B-50K
VR503 B-50K
VERT OUTPUT
Q503 2SD545
VERT DRIVE
Q502 2SC536
VERT OUTPUT
Q504 2SB598
D.Y L603
LIN COIL L602
HORIZ OSC.
2SC945 Q601 or 2SC536
HORIZ DRIVE
2SC945 Q602 or 2SC536
H-HOLD
HORIZ OUTPUT
Q603 2SD325R
T601
HORIZ OUTPUT TRANS
H.V.
TV+B
+B
E
TP-91
TP-92
25Vp-p V
0.7Vp-p V
5Vp-p V
2Vp-p V
20Vp-p H
5.5Vp-p H
3Vp-p H
6Vp-p H
60Vp-p H

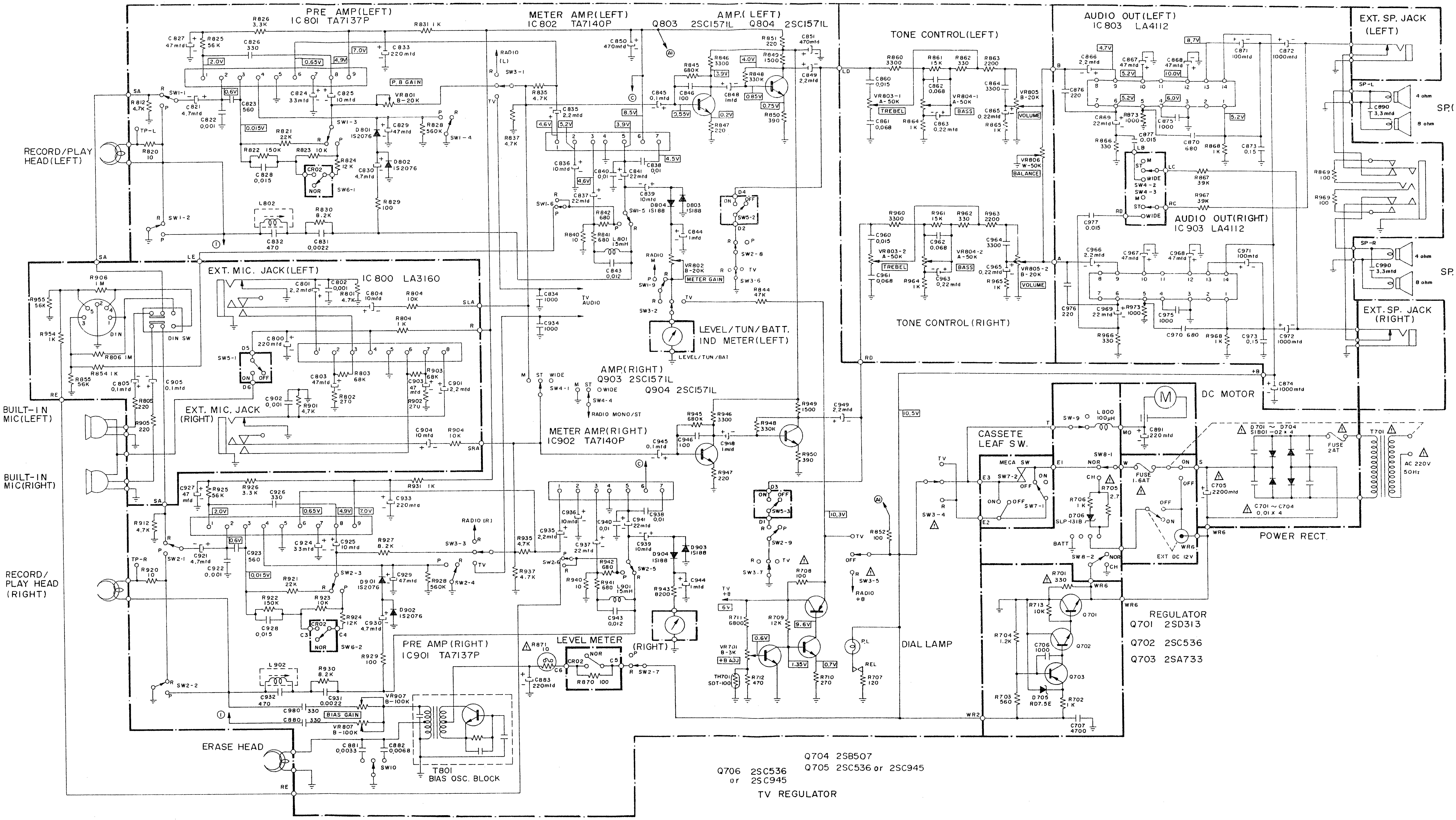
PRODUCT SAFETY NOTICE

PRODUCT SAFETY SHOULD MUST BE CONSIDERED WHEN A COMPONENT REPLACEMENT IS MADE IN ANY AREA OF A UNIT. COMPONENTS INDICATED BY A MARK ⚠ IN THIS SCHEMATIC DIAGRAM SHOW COMPONENTS WHOSE VALUE HAVE SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS SPECIFIED ON THE ATTACHED PARTS LIST BE USED FOR COMPONENT REPLACEMENT POINTED OUT BY THE MARK.

NOTES:

1. All resistance values in ohm.
   K = 1,000 M = 1,000,000
2. Unless otherwise noted in schematic diagram, all capacitors less than 1 are expressed in mfd, and the values larger than 1 are in pF.
3. Voltage reading taken with "VTVM" from point indicated to chassis ground, tuner on unused channel, contrast at max., other controls at normal, local line voltage. (Tape Recorder: Playback position)
4. All waveformes measured with strong signal input, contrast set to give normal picture.
5. Voltage reading may vary ±20%.
6. This is a fundamental circuit diagram. Some production changes may be made with out revision of the diagram.

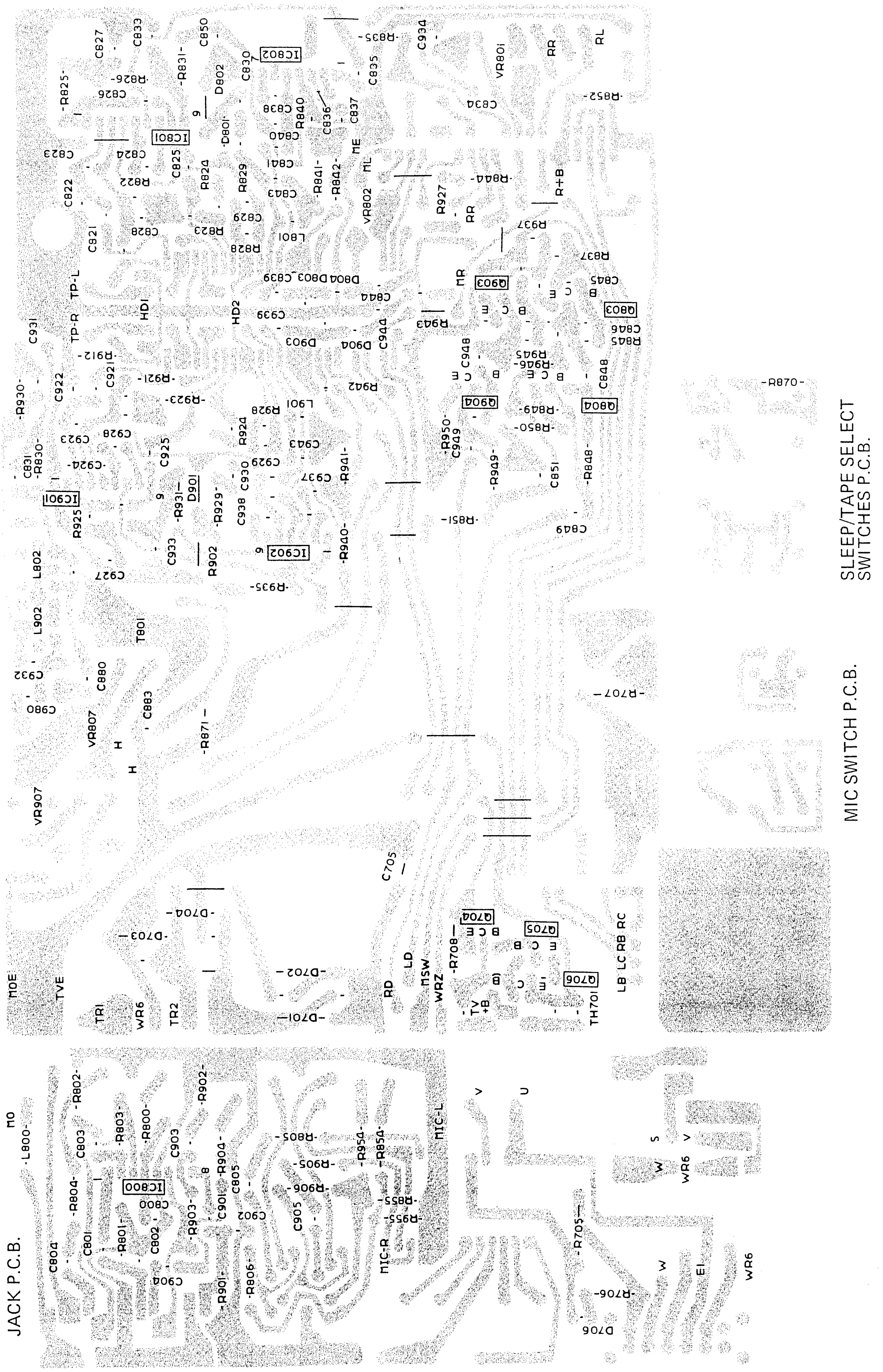
SCHEMATIC DIAGRAM (AMP)

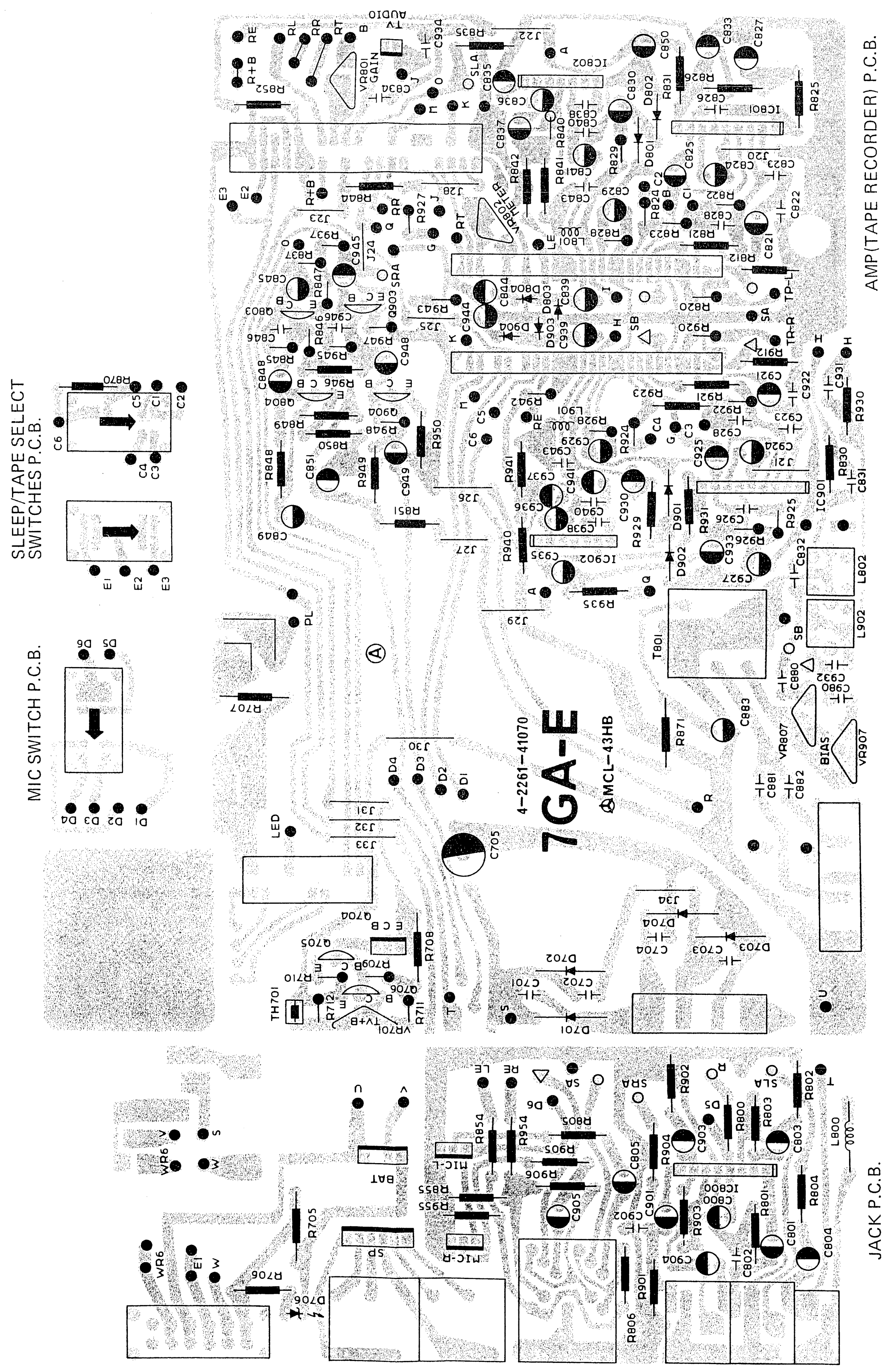

PRE AMP(LEFT)
IC801 TA7137P
METER AMP(LEFT)
IC802 TA7140P
AMP.(LEFT)
Q803 2SC1571L Q804 2SC1571L
TONE CONTROL(LEFT)
AUDIO OUT(LEFT)
IC803 LA4112
EXT. SP. JACK (LEFT)
SP.(L)
RECORD/PLAY HEAD(LEFT)
EXT. MIC. JACK(LEFT)
IC800 LA3160
DIN SW
LEVEL/TUN/BATT. IND METER(LEFT)
AUDIO OUT(RIGHT)
IC903 LA4112
TONE CONTROL(RIGHT)
SP.(R)
EXT. SP. JACK (RIGHT)
BUILT-IN MIC(LEFT)
BUILT-IN MIC(RIGHT)
EXT. MIC. JACK (RIGHT)
AMP(RIGHT)
Q903 2SC1571L
Q904 2SC1571L
METER AMP(RIGHT)
IC902 TA7140P
DC MOTOR
CASSETE LEAF SW.
POWER RECT.
AC 220V 50Hz
FUSE 2AT
RECORD/ PLAY HEAD (RIGHT)
PRE AMP(RIGHT)
IC901 TA7137P
LEVEL METER (RIGHT)
DIAL LAMP
REGULATOR
Q701 2SD313
Q702 2SC536
Q703 2SA733
ERASE HEAD
T801
BIAS OSC. BLOCK
Q704 2SB507
Q705 2SC536 or 2SC945
Q706 2SC536 or 2SC945
TV REGULATOR

SWITCHES

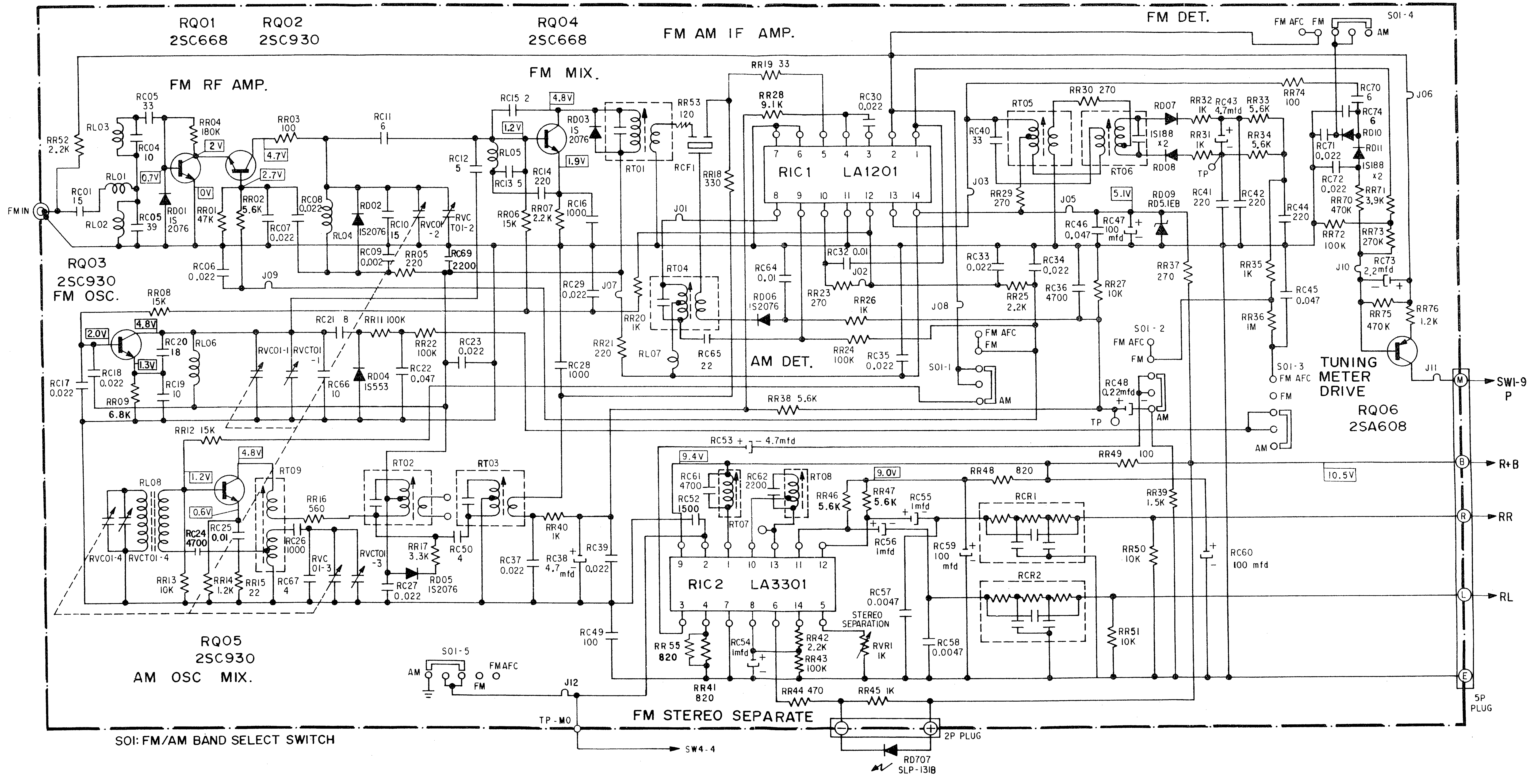
SW 0: TV BAND SELECT
SW 1. SW 2: RECORD/PLAYBACK
SW 3: TV/⏻ (TAPE)/RADIO SELECT
SW 4: MODE
SW 5: MIC
SW 6: TAPE SELECT
SW 7: SLEEP
SW 8: CHARGE
SW10: BEAT CANCEL

CIRCUIT BOARD DIAGRAM (AMP/JACK)


AMP(TAPE RECORDER) P.C.B.
SLEEP/TAPE SELECT SWITCHES P.C.B.
MIC SWITCH P.C.B.
JACK P.C.B.
IC801
IC802
IC901
IC902
IC800
Q903
Q904
Q803
Q804
Q704
Q705
Q706


AMP(TAPE RECORDER) P.C.B.
SLEEP/TAPE SELECT SWITCHES P.C.B.
MIC SWITCH P.C.B.
JACK P.C.B.
7GA-E
4-2261-41070
MCL-43HB
TV AUDIO
VR801 GAIN
BIAS
VR907
VR807
C705
LED
BAT
SP
MIC-L
MIC-R

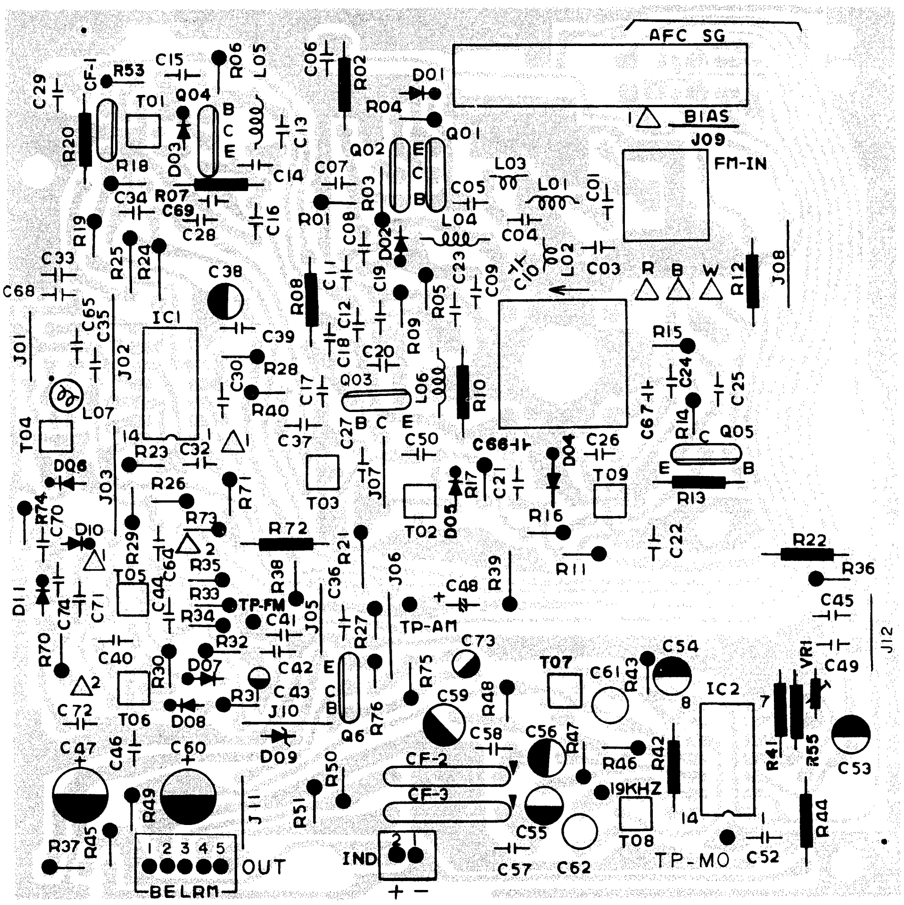
SCHEMATIC DIAGRAM (RADIO)


RQ01
2SC668
RQ02
2SC930
RQ04
2SC668
FM AM IF AMP.
FM DET.
FM RF AMP.
FM MIX.
FM AFC FM
S01-4
AM
J06
FM IN
RR52 2.2K
RL03
RC05 33
RC04 10
RR04 180K
RR03 100
RC11 6
RC12 5
RC15 2
RL05
RC13 5
RC14 220
RD03 1S2076
RR53 120
RT01
RCF1
RR18 330
RR19 33
RR28 9.1K
RC30 0.022
RIC1 LA1201
RT05
RR30 270
RD07
RR32 1K
RC43 4.7mfd
RR33 5.6K
RR74 100
RC70 6
RC74 6
RD10
RD11
1S188 x2
RR31 1K
RR34 5.6K
RC40 33
RT06
RD08
TP
RC71 0.022
RC72 0.022
RR71 3.9K
RR70 470K
RL01
RC01 15
RL02
RC05 39
RD01 1S2076
RR01 47K
RR02 5.6K
RC07 0.022
RC08 0.022
RL04
RD02 1S2076
RC10 15
RVC01-2
RVC T01-2
RC09 0.002
RR05 220
RC69 2200
RR06 15K
RR07 2.2K
RC16 1000
J01
RR29 270
J03
J05
RC41 220
RC42 220
RC44 220
RD09 RD5.1EB
RC46 0.047
RC47 100 mfd
RR72 100K
RR73 270K
RC73 2.2mfd
J10
RQ03
2SC930
FM OSC.
RR08 15K
RC06 0.022
J09
RC29 0.022
J07
RT04
RC64 0.01
RD06 1S2076
RC32 0.01
J02
RR23 270
RR26 1K
RC33 0.022
RC34 0.022
RR25 2.2K
RC36 4700
RR27 10K
RR37 270
RR35 1K
RC45 0.047
RR36 1M
RR75 470K
RR76 1.2K
RC20 18
RL06
RC21 8
RR11 100K
RR22 100K
RC23 0.022
RVC01-1
RVCT01-1
RC18 0.022
RC19 10
RR09 6.8K
RC17 0.022
RC66 10
RD04 1S553
RC22 0.047
RR20 1K
RR21 220
RL07
RC28 1000
RC65 22
AM DET.
RR24 100K
RC35 0.022
J08
S01-1
S01-2
FM AFC
FM
AM
S01-3
TUNING METER DRIVE
RQ06
2SA608
J11
SW1-9 P
RR38 5.6K
RC48 0.22mfd
TP
RR12 15K
RC53 4.7mfd
RR49 100
R+B
10.5V
RL08
RT09
RR16 560
RT02
RT03
RC61 4700
RC62 2200
RT08
RC52 1500
RT07
RR46 5.6K
RR47 5.6K
RC55 1mfd
RR48 820
RCR1
RR39 1.5K
RR
RC24 4700
RC25 0.01
RC26 1000
RVC01-4
RVCT01-4
RR17 3.3K
RC50 4
RR40 1K
RC37 0.022
RC38 4.7mfd
RC39 0.022
RC56 1mfd
RC59 100 mfd
RR50 10K
RC60 100 mfd
RR13 10K
RR14 1.2K
RR15 22
RC67 4
RVC 01-3
RVCT01-3
RC27 0.022
RD05 1S2076
RIC2 LA3301
RC57 0.0047
RCR2
RL
STEREO SEPARATION
RVR1 1K
RC58 0.0047
RR51 10K
RQ05
2SC930
AM OSC MIX.
S01-5
AM
FMAFC
FM
J12
RC49 100
RR55 820
RR41 820
RC54 1mfd
RR42 2.2K
RR43 100K
RR44 470
RR45 1K
E
5P PLUG
TP-M0
FM STEREO SEPARATE
2P PLUG
SW4-4
RD707 SLP-131B
4.8V
1.2V
1.9V
2V
4.7V
0.7V
0V
2.7V
5.1V
2.0V
4.8V
1.3V
4.8V
1.2V
0.6V
9.4V
9.0V

S01: FM/AM BAND SELECT SWITCH

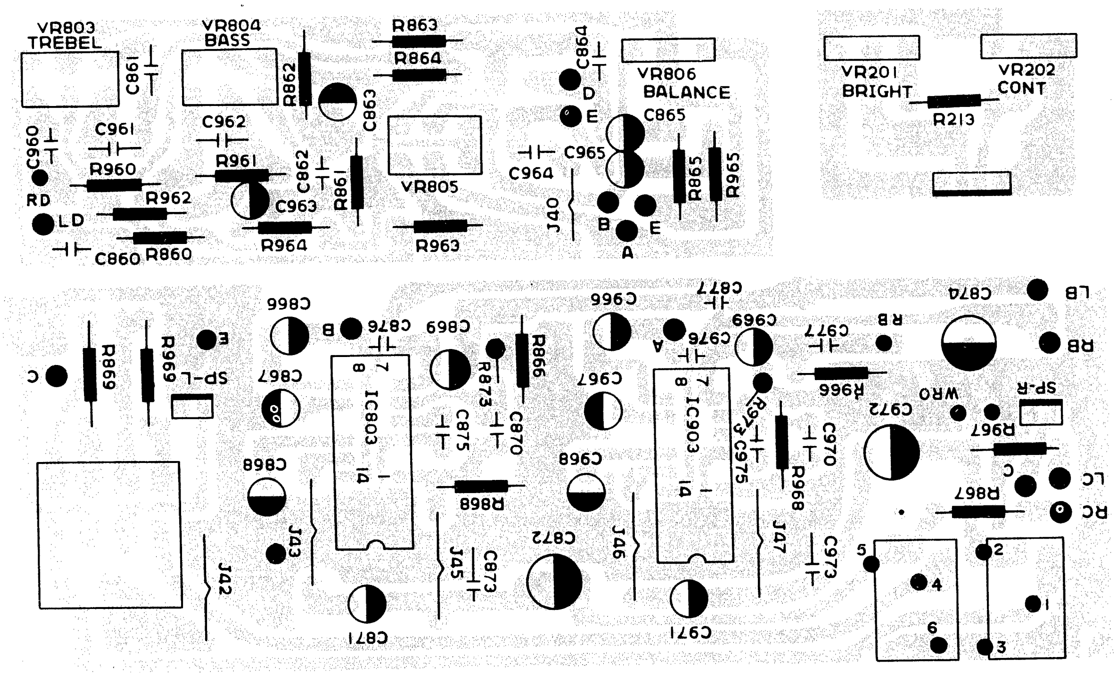
CIRCUIT BOARD DIAGRAM (RADIO)

RADIO P.C.B.


AFC SG
C15
R06
L05
C06
R02
D01
C29
CF-1
R53
Q04
T01
B
C
E
C13
R04
Q01
1
BIAS
J09
R20
R18
D03
C14
C07
Q02
E
C
B
L03
L01
C01
FM-IN
C34
R07
C69
C28
C16
R01
R03
C08
C05
L04
C04
R19
D02
C33
R25
R24
C38
C11
C19
R05
C23
C09
C10
L02
C03
R
B
W
R12
J08
C68
C65
C35
IC1
R08
C12
R09
J01
J02
C39
C18
C20
R15
R28
C30
C17
Q03
L06
R10
C24
C25
C67
R14
L07
R40
Q05
T04
14
1
C37
C27
B
C
E
C50
C66
C26
D04
R23
C32
T03
J07
R17
C21
E
B
D06
J03
R26
R71
T02
D05
T09
R13
R74
C70
R73
R72
R16
D10
2
R29
C64
R21
C22
R22
R11
R36
T05
R35
R38
J06
C36
C48
R39
D11
C74
C71
C44
R33
TP-FM
C41
J05
R34
R32
R27
TP-AM
C45
R70
C40
R30
D07
C42
E
C73
T07
C54
J12
VR1
C49
2
C72
T06
D08
R31
C43
C
R75
C61
R43
IC2
7
8
J10
B
C59
R48
R76
C47
C46
C60
D09
Q6
C58
C56
R47
R46
R42
R41
R55
C53
R50
CF-2
CF-3
R49
J11
19KHZ
R37
R45
R51
C55
T08
14
1
R44
1 2 3 4 5
OUT
IND
2 1
C57
C62
TP-MO
C52
BELRM
+ −

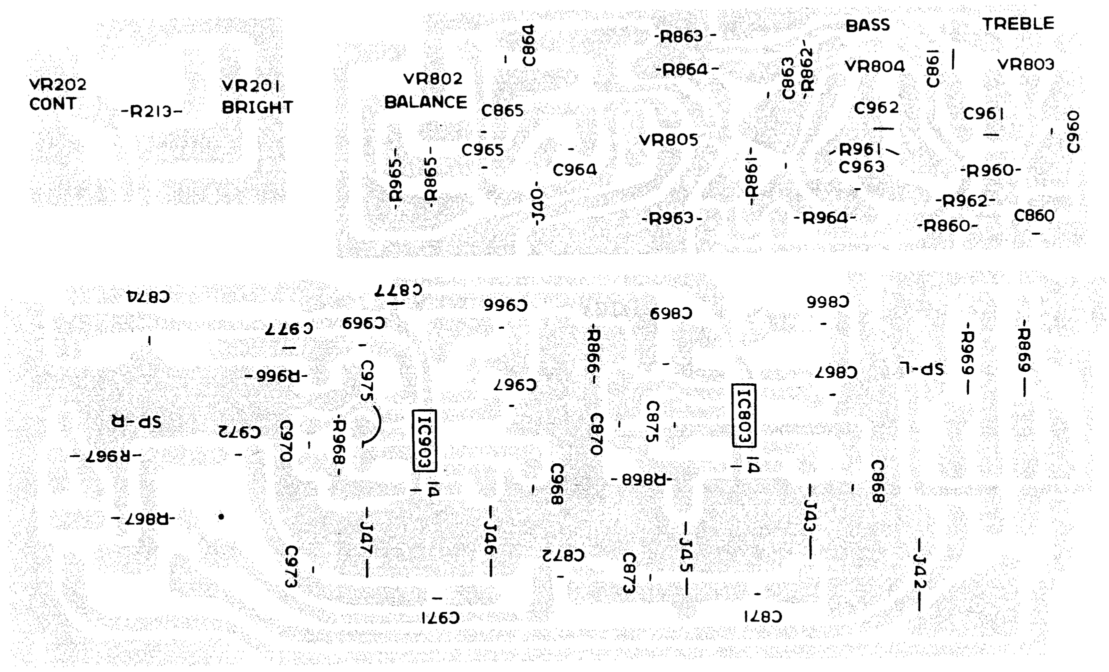
CIRCUIT BOARD DIAGRAM (CONTROL/AUDIO OUTPUT)

CONTROL P.C.B.


VR803
TREBEL
VR804
BASS
C861
R862
R863
R864
C864
D
E
VR806
BALANCE
VR201
BRIGHT
VR202
CONT
R213
C960
C961
C962
C863
C865
RD
R960
R961
C862
R861
VR805
C965
C964
R865
R965
R962
C963
J40
B
E
A
LD
C860
R860
R964
R963
C866
C876
C869
C966
C877
C874
LB
R869
R969
SP-L
C867
IC803
R873
R866
C870
C875
C967
C976
C969
C977
RB
C968
R966
WRO
C972
SP-R
R967
C868
R868
IC903
R973
C975
C970
R968
LC
RC
J43
J42
J45
C873
C872
J46
J47
C973
C871
C971
1
2
3
4
5
6

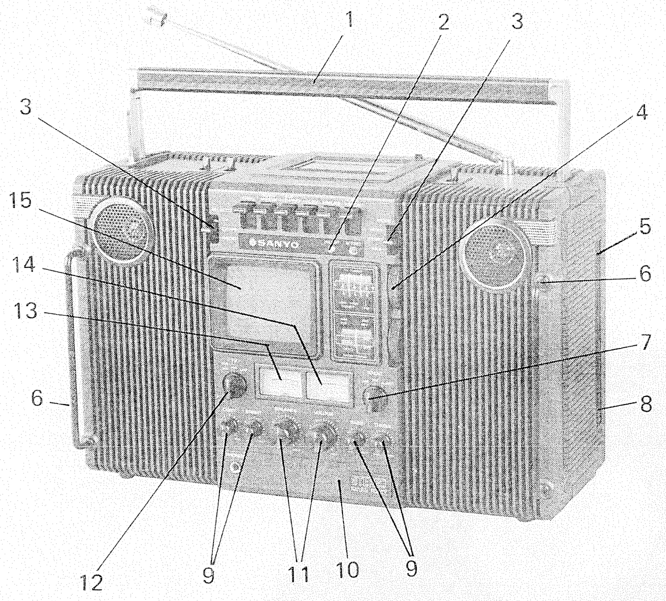
AUDIO OUTPUT P.C.B.

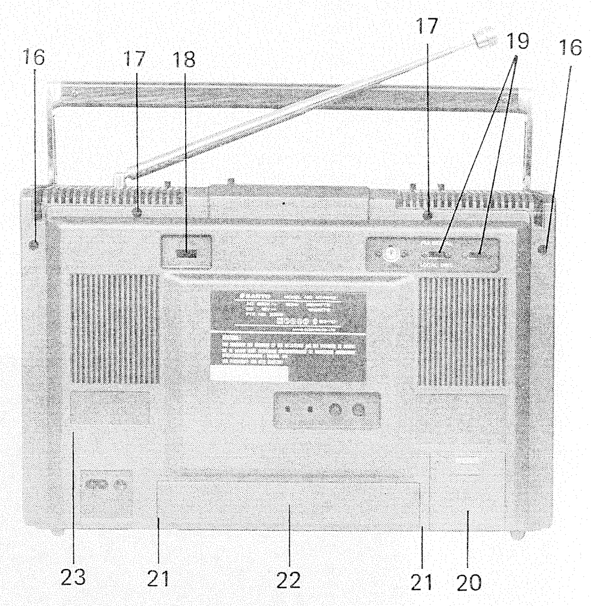
CONTROL P.C.B.

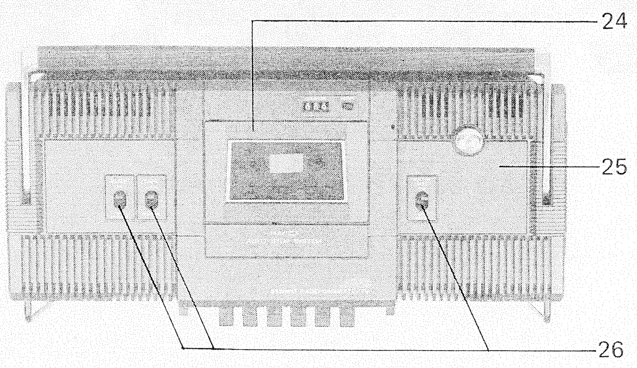

VR202
CONT
R213
VR201
BRIGHT
VR802
BALANCE
C864
C865
C965
C964
R965
R865
J40
R863
R864
VR805
R963
R861
C863
R862
BASS
VR804
C861
TREBLE
VR803
C962
C961
C960
R961
C963
R960
R962
R964
R860
C860
C874
C877
C977
C969
C966
C869
C866
R866
R966
C975
C967
SP-L
R969
R869
SP-R
C972
C970
R968
IC903
C870
C875
IC803
C867
R967
C968
R868
C868
R867
J47
J46
J45
J43
J42
C973
C872
C873
C971
C871

AUDIO OUTPUT P.C.B.

CABINET PARTS LIST

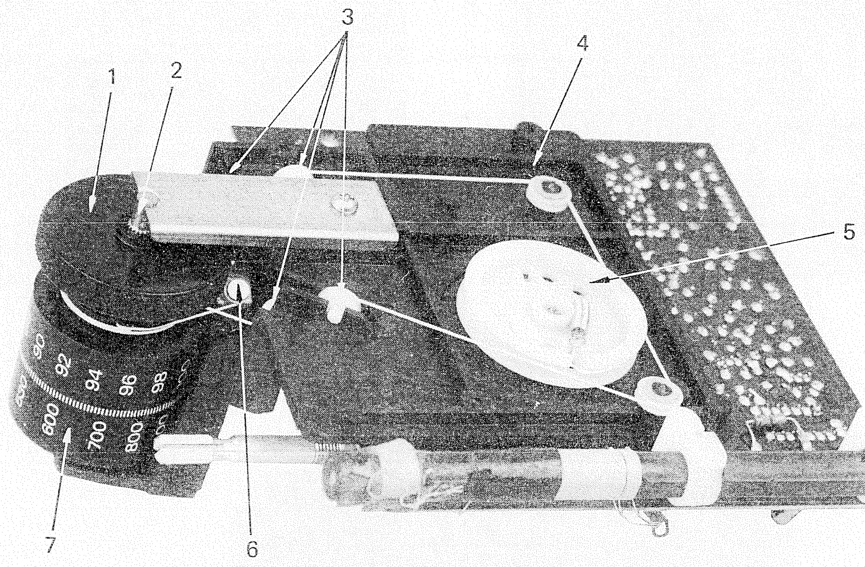






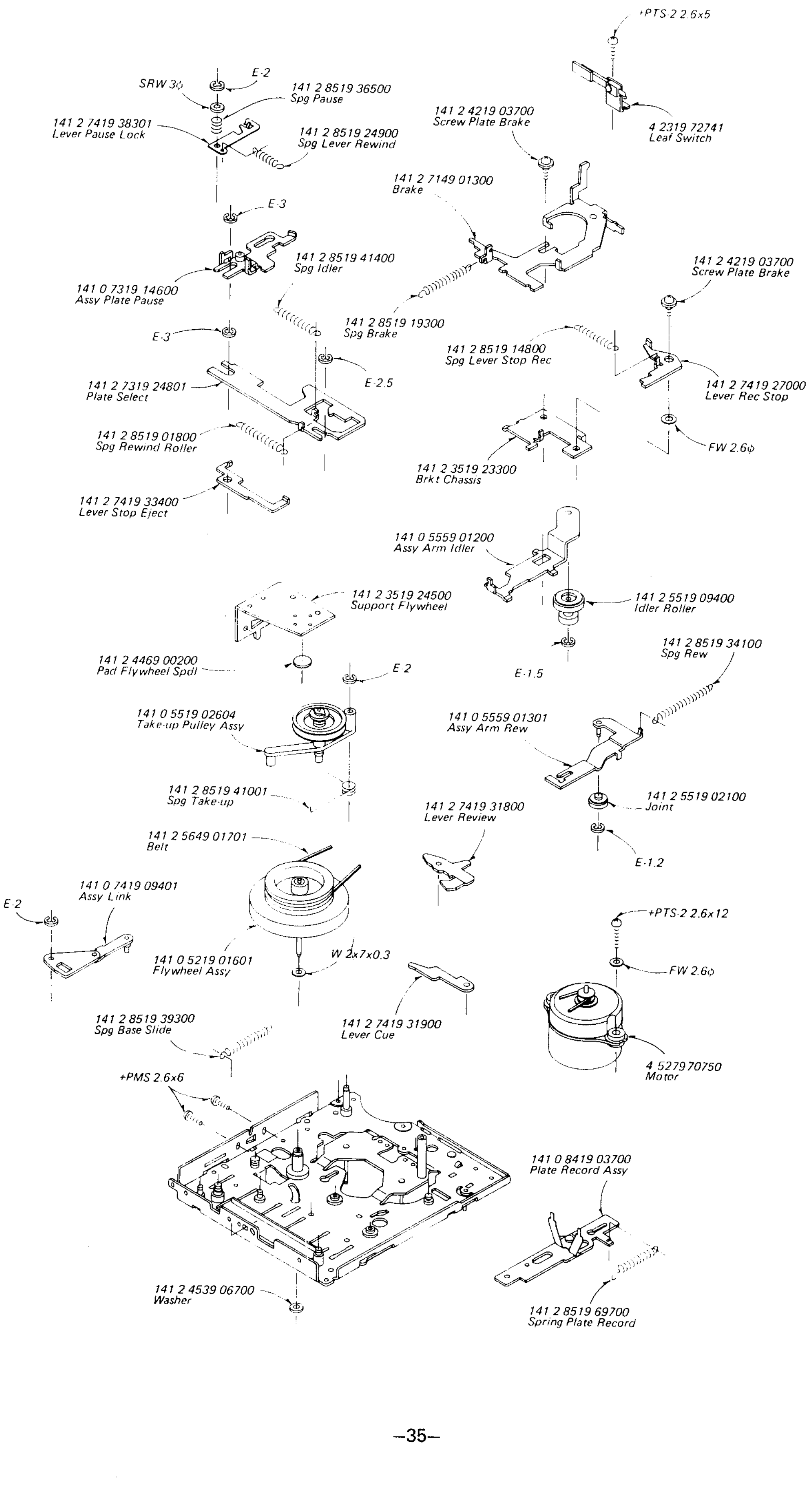
Key No.	Parts No.	Description	Q'ty
1	111 0 1711 06770	HANDLE ASSY-TKD	1
2	111 2 1661 10270	NIGHT SW BUTTON-TKD	1
3	111 2 1641 21970	LEVER KNOB-TKD	2
4	111 0 1641 14670	TV TU KNOB ASSY-TKD	1
5	111 2 1241 11470	SIDE TERM BD-TKD-D	1
6	111 2 1711 20670	FRONT GUARD-TKD	2
7	111 2 1641 21870	RADIO BAND KNOB-TKD	1
8	4 2311 08170	SLIDE SWITCH	1
9	111 0 1641 14470	KNOB ASSY-TKD	4
10	111 0 1121 09573	CAB FRONT ASSY-TKD-C	1
11	111 0 1641 14570	KNOB ASSY-TKD-B	2
12	111 2 1641 21770	TV BAND KNOB-TKD	1
13	4 5111 04270	TUNING METER	1
14	4 5111 04370	TUNING METER	1
15	111 2 1141 14770	SAFETY SHIELD-TKD	1
16	102 3 2203 01004	SBT, 3.0x10, ZK	2
17	111 2 4211 14270	B TITE BUTA 3x16 ZK	2
18	4 2311 08270	SLIDE SWITCH	1
19	4 2311 07470	SLIDE SWITCH	2
20	111 2 1161 17170	CORD BOX COVER-TKD	1
21	102 3 1604 01205	STT 1, 4.0x12, ZK	2
22	111 2 1161 17070	BATTERY COVER-TKD	1
23	111 0 1161 15774	CAB BACK ASSY-TKD-D	1
24	111 0 1241 04370	LID ASSY-TKD	1
25	111 0 1121 09670	CAB TOP ASSY-TKD	1
26	111 2 1641 22070	FINGER KNOB-TKD	3

RADIO UNIT PARTS LIST

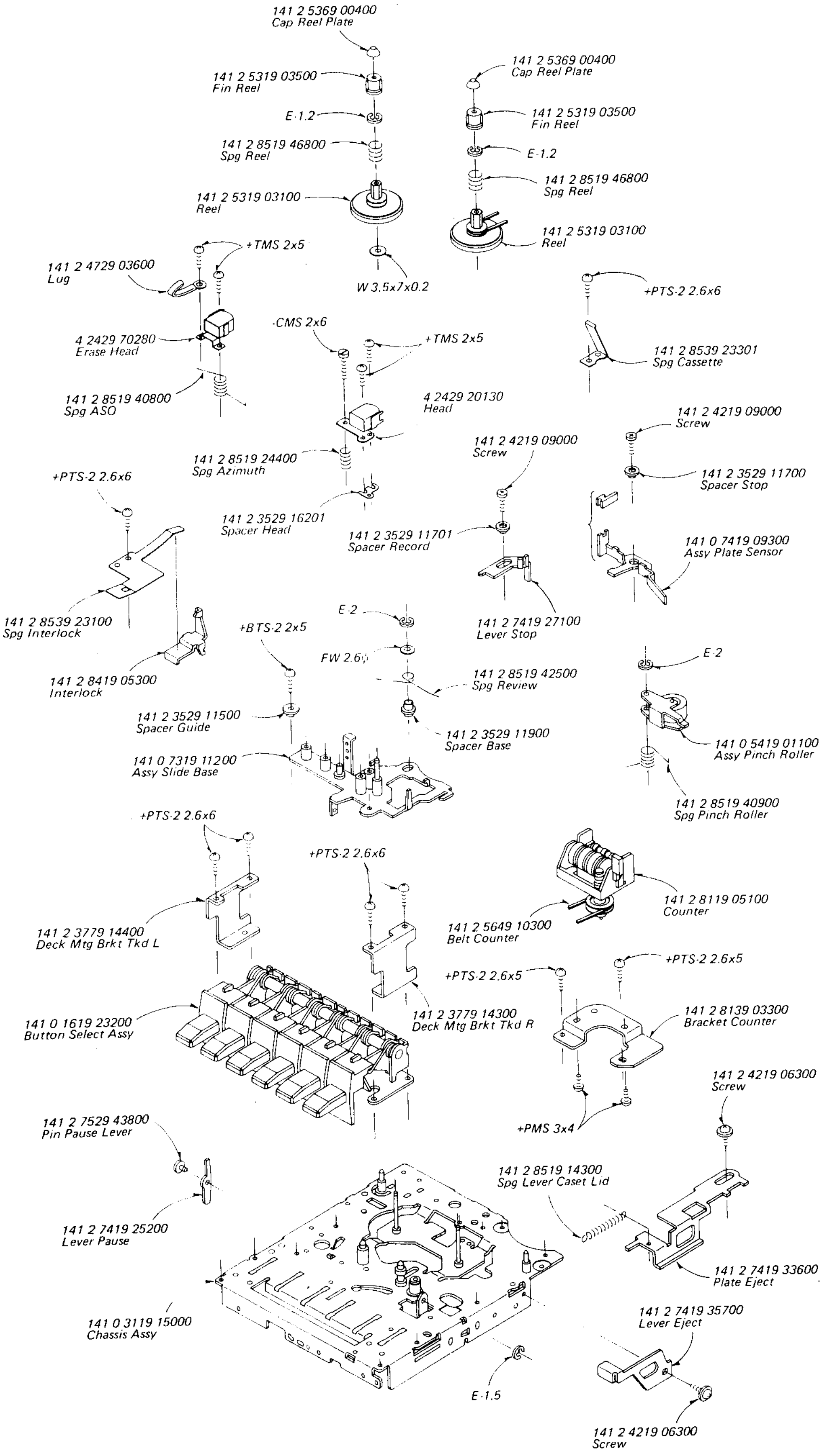


Key No.	Parts No.	Description	Q'ty
1	111 0 1641 14770	RADIO KNOB ASSY-TKD	1
2	111 2 4111 13470	SHAFT DIAL-TKD	1
3	111 2 4131 11270	ARM ROLLER DIAL-TKD	4
4	111 2 3121 17370	RADIO CHASSIS-TKD	1
5	111 2 4131 11070	VC PULLEY-TKD	1
6	111 0 4131 04670	ROLLER MTG ASSY-TKD	1
7	111 2 1531 15373	RADIO IND DRUM-TKD-C	1

TAPE RECORDER MECHANISM PARTS LIST


+PTS-2 2.6x5
E-2
SRW 3φ
141 2 8519 36500
Spg Pause
141 2 7419 38301
Lever Pause Lock
141 2 8519 24900
Spg Lever Rewind
141 2 4219 03700
Screw Plate Brake
4 2319 72741
Leaf Switch
141 2 7149 01300
Brake
E-3
141 2 8519 41400
Spg Idler
141 2 4219 03700
Screw Plate Brake
141 0 7319 14600
Assy Plate Pause
141 2 8519 19300
Spg Brake
E-3
141 2 8519 14800
Spg Lever Stop Rec
E-2.5
141 2 7319 24801
Plate Select
141 2 7419 27000
Lever Rec Stop
141 2 8519 01800
Spg Rewind Roller
FW 2.6φ
141 2 3519 23300
Brkt Chassis
141 2 7419 33400
Lever Stop Eject
141 0 5559 01200
Assy Arm Idler
141 2 3519 24500
Support Flywheel
141 2 5519 09400
Idler Roller
141 2 4469 00200
Pad Flywheel Spdl
E-2
E-1.5
141 2 8519 34100
Spg Rew
141 0 5519 02604
Take-up Pulley Assy
141 0 5559 01301
Assy Arm Rew
141 2 8519 41001
Spg Take-up
141 2 7419 31800
Lever Review
141 2 5519 02100
Joint
141 2 5649 01701
Belt
E-1.2
141 0 7419 09401
Assy Link
E-2
+PTS-2 2.6x12
141 0 5219 01601
Flywheel Assy
W 2x7x0.3
FW 2.6φ
141 2 8519 39300
Spg Base Slide
141 2 7419 31900
Lever Cue
4 5279 70750
Motor
+PMS 2.6x6
141 0 8419 03700
Plate Record Assy
141 2 4539 06700
Washer
141 2 8519 69700
Spring Plate Record

TAPE RECORDER MECHANISM PARTS LIST


141 2 5369 00400
Cap Reel Plate
141 2 5319 03500
Fin Reel
E-1.2
141 2 8519 46800
Spg Reel
141 2 5319 03100
Reel
141 2 5369 00400
Cap Reel Plate
141 2 5319 03500
Fin Reel
E-1.2
141 2 8519 46800
Spg Reel
141 2 5319 03100
Reel
+TMS 2x5
141 2 4729 03600
Lug
W 3.5x7x0.2
+PTS-2 2.6x6
4 2429 70280
Erase Head
-CMS 2x6
+TMS 2x5
141 2 8539 23301
Spg Cassette
141 2 8519 40800
Spg ASO
4 2429 20130
Head
141 2 4219 09000
Screw
141 2 4219 09000
Screw
141 2 8519 24400
Spg Azimuth
+PTS-2 2.6x6
141 2 3529 11700
Spacer Stop
141 2 3529 16201
Spacer Head
141 2 3529 11701
Spacer Record
141 0 7419 09300
Assy Plate Sensor
E-2
141 2 8539 23100
Spg Interlock
+BTS-2 2x5
141 2 7419 27100
Lever Stop
E-2
FW 2.6φ
141 2 8419 05300
Interlock
141 2 8519 42500
Spg Review
141 2 3529 11500
Spacer Guide
141 2 3529 11900
Spacer Base
141 0 5419 01100
Assy Pinch Roller
141 0 7319 11200
Assy Slide Base
141 2 8519 40900
Spg Pinch Roller
+PTS-2 2.6x6
+PTS-2 2.6x6
141 2 8119 05100
Counter
141 2 3779 14400
Deck Mtg Brkt Tkd L
141 2 5649 10300
Belt Counter
+PTS-2 2.6x5
+PTS-2 2.6x5
141 0 1619 23200
Button Select Assy
141 2 3779 14300
Deck Mtg Brkt Tkd R
141 2 8139 03300
Bracket Counter
141 2 4219 06300
Screw
141 2 7529 43800
Pin Pause Lever
+PMS 3x4
141 2 8519 14300
Spg Lever Caset Lid
141 2 7419 25200
Lever Pause
141 2 7419 33600
Plate Eject
141 0 3119 15000
Chassis Assy
141 2 7419 35700
Lever Eject
E-1.5
141 2 4219 06300
Screw

PARTS LIST (TV/AMP)

PRODUCT SAFETY NOTICE

PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A COMPONENT REPLACEMENT IS MADE IN ANY AREA OF A UNIT. COMPONENTS INDICATED BY A MARK ⚠ IN THIS PARTS LIST AND THE SCHEMATIC DIAGRAM SHOW COMPONENTS WHOSE VALUE HAVE SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS SPECIFIED ON THE FOLLOWING PARTS LIST BE USED FOR COMPONENT REPLACEMENT POINTED OUT BY THE MARK.

CHASSIS PARTS

Schematic Location	Parts No.	Description	Q'ty
	111 0 1531 07973	TV IND ASSY-TKD-C	1
	111 0 1641 14670	TV TU KNOB ASSY-TKD	1
	111 0 3121 05370	CHAS FRAME ASSY-TKD	1
	111 2 1241 11570	ANT TERM BOARD-TKD-B	1
	111 2 1691 10371	H HOLD SHAFT-ZL-A1	1
	111 2 3451 15970	CRT MTG BASE-TKD	1
	111 2 3581 14270	TRANS MTG BASE-TKD	1
	111 2 3631 23770	TERM BOARD BRKT-TKD	1
	111 2 3641 13770	LAMP HOLDER-TKD	1
	111 2 3651 21570	SOCKET MTG BRKT-TKD	1
	111 2 3991 10580	SHAFT LOCK-SJ	1
	111 2 5161 11070	NIGHT SW CHIP-TKD-A	1
	111 2 5161 11170	NIGHT SW CHIP-TKD-B	1
	111 2 5231 11370	SOFT FOAM-TKD-B	3
	111 2 5291 11770	TU FBT HOLDER-TKD	1
	111 2 6111 17170	SHIELD CASE-TCD	1
	111 2 6111 17370	SHIELD CASE CAP-TCD	1
	111 2 6111 24870	SHIELD CASE-TJJ	1
	111 2 6111 25870	FBT SHIELD PLATE-TKD	1
	111 2 6111 26370	TAKE UP SHLD PL-TKD	1
	111 2 6111 26470	VIF SHIELD PLATE-TKD	1
	111 2 6111 26770	SHIELD CASE-TKD	1
	111 2 6111 26870	SHIELD CASE BOT-TKD	1
	111 2 6211 21970	PWR RAD PLATE-TKD	1
	111 2 6211 22070	PWR RAD PLATE-TKD-B	1
	111 2 6220 10100	CONNECTING TIP-HW	1
	111 2 6231 15170	CRT EARTH TIP-TKD	1

PACKING MATERIALS

Schematic Location	Parts No.	Description	Q'ty
	111 6 1421 58970	IND CORR CASE-TKD-EA	1
	111 6 2511 17271	IND POLY COVER-VJY-B	1
	111 6 3111 49770	LEFT INNER CUSH-TKD	1
	111 6 3111 52170	R INNER CUSH-TKD-B	1

ACCESSORIES AND LABELS

Schematic Location	Parts No.	Description	Q'ty
	24179137	TAPE C-12EL	1
⚠	111 0 9131 53100	AC CORD ASSY-CEE	1
	111 6 2701 10201	ENV FOR HEAD CLNR-B	1
	111 6 2711 06370	ENVELOPE-HD CLNR	(1)
	111 2 8841 10170	HEAD CLEANER-A	(3)
	111 6 2701 12000	ENV FOR HOOD-TKD-B	1
	111 6 2711 07070	ENVELOPE HOOD	(1)
	111 2 6151 10270	HOOD-TKD-B	(1)
	111 6 9441 00102	STAPLE L-5	(1)
	111 6 2701 97275	ENV FOR PM-TKD-F	1
	111 6 2711 05870	ENVELOPE-SR-C	(1)
	111 6 4111 70375	INST MANUAL-TKD-F	(1)
	111 6 4211 24767	SCHEMATIC DIAG-7G	(1)
⚠	111 0 9131 14300	BATTERY CORD	(1)
	111 6 4551 18770	SERIAL NO LABEL-TJP	1
	111 6 4721 24870	CAUTION LABEL-TKD-B	1

SCREWS-CABINET

Schematic Location	Parts No.	Description	Q'ty
	101 3 1104 00803	SNB , 4.0X 8,Z1	2
	102 3 1203 01204	SNT 2, 3.0X 12,Z1	3
	102 3 1604 01205	STT 1, 4.0X 12,ZK	2
	102 3 1604 01206	STT 1, 4.0X 12,C2	4
	102 3 2203 00802	SBT , 3.0X 8,Z1	6
	102 3 2203 01001	SBT , 3.0X 10,Z1	7
	102 3 2203 01004	SBT , 3.0X 10,ZK	2
	102 3 2203 01602	SBT , 3.0X 16,Z1	1
	102 3 2204 01003	SBT , 4.0X 10,Z1	8
	102 3 2204 01202	SBT , 4.0X 12,Z1	8
	104 3 1104 00013	ZRN 1, 4.0,	4
	105 3 1204 00004	SBW , 4.0,RB	6
	111 2 4211 14270	B TITE BUTA 3X16 ZK	2
	111 3 1103 00803	SBW , 3.0X 8.0X05Z1	1
	111 3 1103 01301	SBW , 3.0X13,0X10Z1	1
	111 3 1104 01014	SBW , 4.0X10.0X08Z1	4

SCREWS-CHASSIS

Schematic Location	Parts No.	Description	Q'ty
	101 3 1102 60502	SNB ,2.6X 5,ZK	4
	101 3 1103 01005	SNB , 3.0X 10,ZK	2
	102 3 1202 60602	SNT 2, 2.6X 6,Z1	1
	102 3 1403 01001	SST , 3.0X 10,Z1	2
	102 3 2203 00802	SBT , 3.0X 8,Z1	6
	102 3 2203 01001	SBT , 3.0X 10,Z1	11
	102 3 2203 01202	SBT , 3.0X 12,Z1	1
	102 3 2204 01003	SBT , 4.0X 10,Z1	3
	102 3 2204 01202	SBT , 4.0X 12,Z1	5
	104 3 1103 00005	ZRN 1, 3.0,	2
	105 3 1503 00002	KSOWA, 3.0,Z1	1
	131 3 1103 00601	SNB , 3.0X 6,Z1 A	5

ELECTRICAL PARTS

Schematic Location	Parts No.	Description	Q'ty
	4 1151 06820	VHF TUNER	1
	4 1151 46320	UHF TUNER	1
	4 1511 07271	SPEAKER	2
	4 1511 07370	SPEAKER	2
	4 1531 04170	BUILT IN MIC	2
	4 2531 11770	U-V FILTER	1
	4 5111 04270	TUNING METER	1
	4 5111 04370	TUNING METER	1
	4 6121 05170	INDICATOR LAMP	1
L001	4 2531 12070	FILTER COIL	1
L101	4 2711 08570	VIDEO IF INPUT TRANS	1
L102	4 2711 66270	VIDEO IF TRAP	1
L103	4 2711 77970	ADJACENT SOUND TRAP	1
L105	4 2531 06971	FILTER COIL	1
L106	4 2531 08274	FILTER COIL	1
L107	4 2531 08870	FILTER COIL	1
L108	4 2531 08970	FILTER COIL	1
L110	4 2531 04771	FILTER COIL	1
L201	4 2721 04701	PEAKING COIL 470	1
L601	4 2731 04970	HORIZ OSC COIL	1
L602	4 2741 05670	LINEARITY COIL	1
⚠L603	4 2761 48170	DEFLECTION YOKE	1
L800	4 2721 01009	PEAKING COIL 100	1
L801	4 2721 01531	PEAKING COIL 15MH	1
L802	4 2591 96070	BIAS TRAP COIL	1
L901	4 2721 01531	PEAKING COIL 15MH	1
L902	4 2591 96070	BIAS TRAP COIL	1
T101	4 2711 29870	VIDEO IF TRANS	1
T102	4 2711 28770	VIDEO IF TRANS	1

NOTICE:
1. Parts orders must contain Model Number, Parts Number and Description.
2. Ordering quantity of resistors must be multiple of 10pcs.
3. Component parts indicated by parentheses in the colum Q'ty are not available.

PARTS LIST (TV/AMP)

Schematic Location	Parts No.	Description	Q'ty
T301	4 2561 04470	SOUND IF TRANS	1
T302	4 2561 35570	SOUND DET TRANS	1
T303	4 2561 35670	SOUND DET TRANS	1
⚠T601	4 2751 50200	FLYBACK TRANS	1
⚠T701	4 2511 44320	POWER TRANS	1
T801	111 0 9061 39770	BIAS OSC BLOCK	1
X201	4 2531 08570	CERAMIC TRAP 5.5M	1

SMALL PARTS

Schematic Location	Parts No.	Description	Q'ty
	4 2261 39471	PC BOARD 7GA-A	1
	4 2261 39670	PC BOARD 7GA-C	1
	4 2261 41070	PC BOARD 7GA-E	1
	4 2311 07470	SLIDE SWITCH	2
	4 2311 07970	SLIDE SWITCH	2
⚠	4 2311 08070	LEVER SWITCH	1
	4 2311 08071	LEVER SWITCH	1
	4 2311 08170	SLIDE SWITCH	1
	4 2311 08270	SLIDE SWITCH	1
	4 2311 08370	LEVER SWITCH	3
	4 2311 08470	ROTARY SWITCH	1
⚠	4 2341 06670	FUSE 1.6A 250V SEMKO	1
⚠	4 2341 06770	FUSE 2A 250V SEMKO	1
	4 2351 45470	FUSE HOLDER	1
	4 2351 45473	FUSE HOLDER	1
	4 2351 65971	ANT SOCKET	1
	4 2351 71270	CRT SOCKET	1
	4 2351 71370	MIC JACK	2
	4 2351 71470	REMOTE JACK	1
	4 2351 71870	HEADPHONE JACK	1
	4 2351 72770	5P DIN SOCKET	1
	4 2351 72870	SPEAKER SOCKET	2
	4 2361 10771	4P MICRO PLUG	2
	4 2361 12270	2P MICRO PLUG	3
	4 2361 12370	3P MICRO PLUG	2
⚠	4 2361 13370	AC DC SOCKET	1
	4 2361 13470	6P MICRO PLUG	1
	4 2361 13870	2P BAT. TERMINAL	1
	4 2441 06370	ROD ANTENNA	1
	111 0 9081 02003	2P MICRO SOCKET ASSY	1
	111 0 9081 02004	2P MICRO SOCKET ASSY	2
	111 0 9081 02007	2P MICRO SOCKET ASSY	1
	111 0 9081 03020	3P MICRO SOCKET ASSY	1
	111 0 9081 03021	3P MICRO SOCKET ASSY	1
	111 0 9081 04019	4P MICRO SOCKET ASSY	1
	111 0 9081 04021	4P MICRO SOCKET ASSY	1
	111 0 9081 05009	5P MICRO SOCKET ASSY	1
	111 0 9081 06008	6P MICRO SOCKET ASSY	1
	111 0 9081 13209	F SOCKET CORD	1
	111 0 9141 20571	1P PLUG CORD 300-B1	1
	111 2 6220 11100	WIRE WRAP TERMINAL	9

VARIABLE RESISTORS

Schematic Location	Parts No.	Description	Q'ty
VR001	4 2221 27270	TUNING VR B-100K	1
VR002	4 2221 29270	8PFRB-100K	1
VR003	4 2221 29270	8PFRB-100K	1
VR004	4 2221 29270	8PFRB-100K	1
VR201	4 2221 26370	16FRN20FB-500KP	1
VR202	4 2221 26870	16FRN20FE-1K	1
VR501	4 2221 21270	18K2FR25B-100K	1
VR502	4 2221 21870	18K2FR4B-50K	1
VR503	4 2221 21870	18K2FR4B-50K	1
VR701	4 2221 23870	10FFRB-3K	1
VR801	4 2221 29670	10FFRB-20K	1
VR802	4 2221 29670	10FFRB-20K	1
VR803	4 2221 27170	16FRN20FA-50K-IP	1
VR804	4 2221 27170	16FRN20FA-50K-IP	1
VR805	4 2221 27070	16FRN30FB-20K-2P1/2	1
VR806	4 2221 26970	16FRN20FW-50K	1
VR807	4 2221 24370	10FFRB-100K	1
VR907	4 2221 24370	10FFRB-100K	1

CAPACITORS

Schematic Location	Parts No.	Description	Q'ty
C002	C1HYDP473Z--	CERAMIC 47000P Z 50V	1
C003	C1HRE-105A--	ELECT 1M 50V	1
C004	C1ARE-226A--	ELECT 22M 10V	1
C005	C1VRE-475A--	ELECT 4.7M 35V	1
C006	C1HYDP472Z--	CERAMIC 4700P Z 50V	1
C007	C1HYDP472Z--	CERAMIC 4700P Z 50V	1
C008	C1HCDD5R0RH-	CERAMIC 5P RH 50V	1
C100	C1HCDK820RH-	CERAMIC 82P RH 50V	1
C101	C1HCDK390RH-	CERAMIC 39P RH 50V	1
C102	C1HCDK560RH-	CERAMIC 56P RH 50V	1
C103	C1HYDK472W--	CERAMIC 4700P W 50V	1
C104	C0JRE-107A--	ELECT 100M 6.3V	1
C105	C1HYDK102W--	CERAMIC 1000P W 50V	1
C107	C1HYDK472W--	CERAMIC 4700P W 50V	1
C108	C1HYDK102W--	CERAMIC 1000P W 50V	1
C109	C1HCDK330RH-	CERAMIC 33P RH 50V	1
C110	C1HCDK560RH-	CERAMIC 56P RH 50V	1
C111	C1HYDK472W--	CERAMIC 4700P W 50V	1
C112	C1HCDK101SL-	CERAMIC 100P SL 50V	1
C113	C1HCDD3R0RH-	CERAMIC 3P RH 50V	1
C114	C1HYDK472W--	CERAMIC 4700P W 50V	1
C115	C1HYDK472W--	CERAMIC 4700P W 50V	1
C116	C2HCTJ2R7A--	CERAMIC 2.7P A 500V	1
C117	C1HYDK472W--	CERAMIC 4700P W 50V	1
C118	C1HCDD100RH-	CERAMIC 10P RH 50V	1
C119	C1HCDD100RH-	CERAMIC 10P RH 50V	1
C120	C1HYDK472W--	CERAMIC 4700P W 50V	1
C121	C1HCDD5R0RH-	CERAMIC 5P RH 50V	1
C122	C1HCDD5R0RH-	CERAMIC 5P RH 50V	1
C124	C1HRE-105A--	ELECT 1M 50V	1
C125	C1ARE-477A--	ELECT 470M 10V	1
C130	C1HYDK472W--	CERAMIC 4700P W 50V	1
C151	C1ERE-475A--	ELECT 4.7M 25V	1
C152	C1HFRM223A--	MYLAR 0.022M 50V	1
C153	C1HYDP473Z--	CERAMIC 47000P Z 50V	1
C154	C1CTDM225A--	TANTAL 2.2M 16V	1
or	C1CUEM225A--	ELECT 2.2M 16V	1
C201	C1HFRK104A--	MYLAR 0.1M 50V	1
C202	C1HFRK222A--	MYLAR 0.0022M 50V	1
C203	C0JRE-227A--	ELECT 220M 6.3V	1
C204	C1HYDK102W--	CERAMIC 1000P W 50V	1
C205	C2ARE-105A--	ELECT 1M 100V	1
C206	C2HYDP103Z--	CERAMIC 0.01M Z 500V	1
C207	C1HRE-475A--	ELECT 4.7M 50V	1
C208	C1HYDK472W--	CERAMIC 4700P W 50V	1
C301	C1ARE-226A--	ELECT 22M 10V	1
C302	C1HYDP103Z--	CERAMIC 10000P Z 50V	1
C303	C1HYDP103Z--	CERAMIC 10000P Z 50V	1
C304	C1HYDP103Z--	CERAMIC 10000P Z 50V	1
C305	C1HYDP103Z--	CERAMIC 10000P Z 50V	1
C306	C1CRE-106A--	ELECT 10M 16V	1
C307	C1HYDK561W--	CERAMIC 560P W 50V	1
C308	C1HYDK561W--	CERAMIC 560P W 50V	1
C309	C1HYDK472W--	CERAMIC 4700P W 50V	1
C312	C1CRE-106A--	ELECT 10M 16V	1
C402	C1HRE-105A--	ELECT 1M 50V	1
C403	C1HFRM223A--	MYLAR 0.022M 50V	1
C501	C1HFRM223A--	MYLAR 0.022M 50V	1
C502	C1HFRM333A--	MYLAR 0.033M 50V	1
C503	C1HFRK153A--	MYLAR 0.015M 50V	1
C504	C1HFRK333A--	MYLAR 0.033M 50V	1
C505	C0JTDM106A--	TANTAL 10M 6.3V	1
or	C1AUEM106A--	ELECT 10M 10V	1
C506	C1ARE-476A--	ELECT 47M 10V	1
C507	C1ARE-477A--	ELECT 470M 10V	1
C508	C1ARE-476A--	ELECT 47M 10V	1
C509	C1ERE-475A--	ELECT 4.7M 25V	1
C511	C0JRE-108A--	ELECT 1000M 6.3V	1

NOTICE:
1. Parts orders must contain Model Number, Parts Number and Description.
2. Ordering quantity of resistors must be multiple of 10pcs.
3. Component parts indicated by parentheses in the colum Q'ty are not available.

PARTS LIST (TV/AMP)

Schematic Location	Parts No.	Description	Q'ty
C512	C1HRE-474A--	ELECT 0.47M 50V	1
C601	C1ARE-108A--	ELECT 1000M 10V	1
C602	C1HFRM332A--	MYLAR 0.0033M 50V	1
C603	C1HFRM472A--	MYLAR 0.0047M 50V	1
C604	C1HFRM472A--	MYLAR 0.0047M 50V	1
C605	C1HFRM104A--	MYLAR 0.1M 50V	1
C606	C1ERE-475A--	ELECT 4.7M 25V	1
C607	C1HFRM473A--	MYLAR 0.047M 50V	1
C608	C1HFRK153A--	MYLAR 0.015M 50V	1
C609	C1HFRK104A--	MYLAR 0.1M 50V	1
C611	C1ARE-476A--	ELECT 47M 10V	1
C612	C1HYDK102W--	CERAMIC 1000P W 50V	1
C613	C1CRE-106A--	ELECT 10M 16V	1
⚠C614	C2AQRK223A--	POLYPR 0.022M 100V	1
C615	C2AQRK103A--	POLYPR 0.01M 100V	1
C616	C2AQRK472A--	POLYPR 0.0047M 100V	1
C617	C2HYDK331W--	CERAMIC 330P W 500V	1
⚠C701	C1HYDP103Z--	CERAMIC 10000P Z 50V	1
⚠C702	C1HYDP103Z--	CERAMIC 10000P Z 50V	1
⚠C703	C1HYDP103Z--	CERAMIC 10000P Z 50V	1
⚠C704	C1HYDP103Z--	CERAMIC 10000P Z 50V	1
⚠C705	C1ERE-228A--	ELECT 2200M 25V	1
C706	C1HYDK102W--	CERAMIC 1000P W 50V	1
C707	C1HYDK472W--	CERAMIC 4700P W 50V	1
C800	C1ARE-227A--	ELECT 220M 10V	1
C801	C1CTDM225A--	TANTAL 2.2M 16V	1
or	C1CUEM225A--	ELECT 2.2M 16V	1
C802	C1HFRK102A--	MYLAR 0.001M 50V	1
C803	C0JRE-476A--	ELECT 47M 6.3V	1
C804	C1CRE-106A--	ELECT 10M 16V	1
C805	C1EUEM104A--	ELECT 0.1M 25V	1
or	C1VTDM104A--	TANTAL 0.1M 35V	1
C821	C1CTDM475A--	TANTAL 4.7M 16V	1
or	C1CUEM475A--	ELECT 4.7M 16V	1
C822	C1HFRK102A--	MYLAR 0.001M 50V	1
C823	C1HYDK561W--	CERAMIC 560P W 50V	1
C824	C0JRE-336A--	ELECT 33M 6.3V	1
C825	C1CRE-106A--	ELECT 10M 16V	1
C826	C1HYDK331W--	CERAMIC 330P W 50V	1
C827	C0JRE-476A--	ELECT 47M 6.3V	1
C828	C1HFRK153A--	MYLAR 0.015M 50V	1
C829	C0JRE-476A--	ELECT 47M 6.3V	1
C830	C1ERE-475A--	ELECT 4.7M 25V	1
C831	C1HFRK222A--	MYLAR 0.0022M 50V	1
C832	C1HYDK471W--	CERAMIC 470P W 50V	1
C833	C1ARE-227A--	ELECT 220M 10V	1
C834	C1HFRK102A--	MYLAR 0.001M 50V	1
C835	C1CTDM225A--	TANTAL 2.2M 16V	1
or	C1CUEM225A--	ELECT 2.2M 16V	1
C836	C1CRE-106A--	ELECT 10M 16V	1
C837	C1ARE-226A--	ELECT 22M 10V	1
C838	C1HFRK103A--	MYLAR 0.01M 50V	1
C839	C1CRE-106A--	ELECT 10M 16V	1
C840	C1HFRK103A--	MYLAR 0.01M 50V	1
C841	C1ARE-226A--	ELECT 22M 10V	1
C843	C1HFRK123A--	MYLAR 0.012M 50V	1
C844	C1HRE-105A--	ELECT 1M 50V	1
C845	C1EUEM104A--	ELECT 0.1M 25V	1
or	C1VTDM104A--	TANTAL 0.1M 35V	1
C846	C1HCDJ101SL-	CERAMIC 100P SL 50V	1
C848	C1HRE-105A--	ELECT 1M 50V	1
C849	C1HRE-225A--	ELECT 2.2M 50V	1
C850	C1CRE-477A--	ELECT 470M 16V	1
C851	C1ARE-477A--	ELECT 470M 10V	1
C860	C1HFRK153A--	MYLAR 0.015M 50V	1
C861	C1HFRK683A--	MYLAR 0.068M 50V	1
C862	C1HFRK683A--	MYLAR 0.068M 50V	1
C863	C1EUEM224A--	ELECT 0.22M 25V	1
or	C1VTDM224A--	TANTAL 0.22M 35V	1
C864	C1HFRK332A--	MYLAR 0.0033M 50V	1
C865	C1EUEM224A--	ELECT 0.22M 25V	1
or	C1VTDM224A--	TANTAL 0.22M 35V	1
C866	C1HRE-225A--	ELECT 2.2M 50V	1
C867	C1ARE-476A--	ELECT 47M 10V	1
C868	C1ARE-476A--	ELECT 47M 10V	1
C869	C1ARE-226A--	ELECT 22M 10V	1
C870	C1HYDK681W--	CERAMIC 680P W 50V	1
C871	C1ARE-107A--	ELECT 100M 10V	1
C872	C1ARE-108A--	ELECT 1000M 10V	1
C873	C1HFRK154A--	MYLAR 0.15M 50V	1
C874	C1CRE-108A--	ELECT 1000M 16V	1
C875	C1HYDK102W--	CERAMIC 1000P W 50V	1
C876	C1HCDK221SL-	CERAMIC 220P SL 50V	1
C877	C1HFRK153A--	MYLAR 0.015M 50V	1
C880	C1HYDK331W--	CERAMIC 330P W 50V	1
C881	C1HFRK332A--	MYLAR 0.0033M 50V	1
C882	C1HFRK682A--	MYLAR 0.0068M 50V	1
C883	C1CRE-227A--	ELECT 220M 16V	1
C890	C1EATN335A--	ELECT 3.3M 25V	1
C891	C1CRE-227A--	ELECT 220M 16V	1
C901	C1CTDM225A--	TANTAL 2.2M 16V	1
or	C1CUEM225A--	ELECT 2.2M 16V	1
C902	C1HFRK102A--	MYLAR 0.001M 50V	1
C903	C0JRE-476A--	ELECT 47M 6.3V	1
C904	C1CRE-106A--	ELECT 10M 16V	1
C905	C1EUEM104A--	ELECT 0.1M 25V	1
or	C1VTDM104A--	TANTAL 0.1M 35V	1
C921	C1CTDM475A--	TANTAL 4.7M 16V	1
or	C1CUEM475A--	ELECT 4.7M 16V	1
C922	C1HFRK102A--	MYLAR 0.001M 50V	1
C923	C1HYDK561W--	CERAMIC 560P W 50V	1
C924	C0JRE-336A--	ELECT 33M 6.3V	1
C925	C1CRE-106A--	ELECT 10M 16V	1
C926	C1HYDK331W--	CERAMIC 330P W 50V	1
C927	C0JRE-476A--	ELECT 47M 6.3V	1
C928	C1HFRK153A--	MYLAR 0.015M 50V	1
C929	C0JRE-476A--	ELECT 47M 6.3V	1
C930	C1ERE-475A--	ELECT 4.7M 25V	1
C931	C1HFRK222A--	MYLAR 0.0022M 50V	1
C932	C1HYDK471W--	CERAMIC 470P W 50V	1
C933	C1ARE-227A--	ELECT 220M 10V	1
C934	C1HFRK102A--	MYLAR 0.001M 50V	1
C935	C1CTDM225A--	TANTAL 2.2M 16V	1
or	C1CUEM225A--	ELECT 2.2M 16V	1
C936	C1CRE-106A--	ELECT 10M 16V	1
C937	C1ARE-226A--	ELECT 22M 10V	1
C938	C1HFRK103A--	MYLAR 0.01M 50V	1
C939	C1CRE-106A--	ELECT 10M 16V	1
C940	C1HFRK103A--	MYLAR 0.01M 50V	1
C941	C1ARE-226A--	ELECT 22M 10V	1
C943	C1HFRK123A--	MYLAR 0.012M 50V	1
C944	C1HRE-105A--	ELECT 1M 50V	1
C945	C1EUEM104A--	ELECT 0.1M 25V	1
or	C1VTDM104A--	TANTAL 0.1M 35V	1
C946	C1HCDK101SL-	CERAMIC 100P SL 50V	1
C948	C1HRE-105A--	ELECT 1M 50V	1
C949	C1HRE-225A--	ELECT 2.2M 50V	1
C960	C1HFRK153A--	MYLAR 0.015M 50V	1
C961	C1HFRK683A--	MYLAR 0.068M 50V	1
C962	C1HFRK683A--	MYLAR 0.068M 50V	1
C963	C1EUEM224A--	ELECT 0.22M 25V	1
or	C1VTDM224A--	TANTAL 0.22M 35V	1
C964	C1HFRK332A--	MYLAR 0.0033M 50V	1
C965	C1EUEM224A--	ELECT 0.22M 25V	1
or	C1VTDM224A--	TANTAL 0.22M 35V	1
C966	C1HRE-225A--	ELECT 2.2M 50V	1
C967	C1ARE-476A--	ELECT 47M 10V	1
C968	C1ARE-476A--	ELECT 47M 10V	1
C969	C1ARE-226A--	ELECT 22M 10V	1
C970	C1HYDK681W--	CERAMIC 680P W 50V	1
C971	C1ARE-107A--	ELECT 100M 10V	1
C972	C1ARE-108A--	ELECT 1000M 10V	1
C973	C1HFRK154A--	MYLAR 0.15M 50V	1
C975	C1HYDK102W--	CERAMIC 1000P W 50V	1
C976	C1HCDK221SL-	CERAMIC 220P SL 50V	1
C977	C1HFRK153A--	MYLAR 0.015M 50V	1

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PARTS LIST (TV/AMP)

Schematic Location	Parts No.	Description	Q'ty
C980	C1HYDK331W--	CERAMIC 330P W 50V	1
C990	C1EATN335A--	ELECT 3.3M 25V	1

FIXED RESISTORS

Schematic Location	Parts No.	Description	Q'ty
R001	R2ESPJ562A	CARBON 5.6K 1/4WJ	1
R003	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R004	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R005	R2ESPJ272A	CARBON 2.7K 1/4WJ	1
R100	R2ESPJ221A	CARBON 220 1/4WJ	1
R101	R2ESPJ100A	CARBON 10 1/4WJ	1
R102	R2ESPJ392A	CARBON 3.9K 1/4WJ	1
R103	R2ESUJ331A	CARBON 330 1/4WJ	1
R104	R2ESPJ101A	CARBON 100 1/4WJ	1
R105	R2ESPJ152A	CARBON 1.5K 1/4WJ	1
R106	R2ESPJ271A	CARBON 270 1/4WJ	1
R107	R2ESPJ101A	CARBON 100 1/4WJ	1
R108	R2ESPJ153A	CARBON 15K 1/4WJ	1
R109	R2ESPJ682A	CARBON 6.8K 1/4WJ	1
R111	R2ESPJ271A	CARBON 270 1/4WJ	1
R112	R2ESPJ181A	CARBON 180 1/4WJ	1
R113	R2ESPJ103A	CARBON 10K 1/4WJ	1
R114	R2ESPJ822A	CARBON 8.2K 1/4WJ	1
R115	R2ESPJ101A	CARBON 100 1/4WJ	1
R116	R2ESPJ560A	CARBON 56 1/4WJ	1
R117	R2ESPJ332A	CARBON 3.3K 1/4WJ	1
R118	R2ESPJ392A	CARBON 3.9K 1/4WJ	1
R119	R2ESPJ393A	CARBON 39K 1/4WJ	1
R121	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
⚠R122	R2HCPK100A	SOLID 10 1/2WK	1
R151	R2ESPJ391A	CARBON 390 1/4WJ	1
R152	R2ESPJ122A	CARBON 1.2K 1/4WJ	1
R153	R2ESPJ821A	CARBON 820 1/4WJ	1
R154	R2ESPJ102A	CARBON 1K 1/4WJ	1
R155	R2ESPJ183A	CARBON 18K 1/4WJ	1
R156	R2ESPJ332A	CARBON 3.3K 1/4WJ	1
R157	R2ESUJ472A	CARBON 4.7K 1/4WJ	1
R158	R2ESPJ331A	CARBON 330 1/4WJ	1
R160	R2ESPJ682A	CARBON 6.8K 1/4WJ	1
R200	R2ESPJ470A	CARBON 47 1/4WJ	1
R201	R2ESPJ681A	CARBON 680 1/4WJ	1
R202	R2ESPJ181A	CARBON 180 1/4WJ	1
R203	R2ESPJ821A	CARBON 820 1/4WJ	1
R204	R2ESPJ103A	CARBON 10K 1/4WJ	1
R205	R2ESPJ220A	CARBON 22 1/4WJ	1
R206	R2ESPJ681A	CARBON 680 1/4WJ	1
R207	R2ESPJ152A	CARBON 1.5K 1/4WJ	1
R208	R2ESPJ105A	CARBON 1M 1/4WJ	1
R209	R2ESPJ223A	CARBON 22K 1/4WJ	1
R211	R2ESPJ105A	CARBON 1M 1/4WJ	1
R212	R2ESPJ474A	CARBON 470K 1/4WJ	1
R213	R2HCPK275A	SOLID 2.7M 1/2WK	1
R214	R2HCPK825A	SOLID 8.2M 1/2WK	1
R216	R2ESPJ125A	CARBON 1.2M 1/4WJ	1
R217	R2ESPJ152A	CARBON 1.5K 1/4WJ	1
R301	R2HCPK220A	SOLID 22 1/2WK	1
R302	R2ESPJ221A	CARBON 220 1/4WJ	1
R303	R2ESPJ273A	CARBON 27K 1/4WJ	1
R304	R2ESPJ822A	CARBON 8.2K 1/4WJ	1
R305	R2ESPJ391A	CARBON 390 1/4WJ	1
R306	R2ESPJ332A	CARBON 3.3K 1/4WJ	1
R307	R2ESPJ121A	CARBON 120 1/4WJ	1
R308	R2ESPJ181A	CARBON 180 1/4WJ	1
R309	R2ESPJ222A	CARBON 2.2K 1/4WJ	1
R311	R2ESPJ102A	CARBON 1K 1/4WJ	1
R312	R2ESPJ102A	CARBON 1K 1/4WJ	1
R313	R2ESPJ103A	CARBON 10K 1/4WJ	1
R314	R2ESPJ103A	CARBON 10K 1/4WJ	1
R315	R2ESPJ153A	CARBON 15K 1/4WJ	1
R316	R2ESPJ333A	CARBON 33K 1/4WJ	1
R317	R2ESPJ333A	CARBON 33K 1/4WJ	1
R402	R2ESPJ101A	CARBON 100 1/4WJ	1
R403	R2ESPJ561A	CARBON 560 1/4WJ	1
R404	R2ESPJ473A	CARBON 47K 1/4WJ	1
R405	R2ESPJ224A	CARBON 220K 1/4WJ	1
R406	R2ESPJ681A	CARBON 680 1/4WJ	1
R501	R2ESPJ103A	CARBON 10K 1/4WJ	1
R502	R2ESPJ223A	CARBON 22K 1/4WJ	1
⚠R503	R2HCPK8R2A	SOLID 8.2 1/2WK	1
R504	R2ESPJ103A	CARBON 10K 1/4WJ	1
R505	R2ESPJ272A	CARBON 2.7K 1/4WJ	1
R506	R2ESPJ123A	CARBON 12K 1/4WJ	1
R507	R2ESPJ680A	CARBON 68 1/4WJ	1
R508	R3APPJ0R6A	OXIDE-M 0.6 1WJ	1
R509	R2ESPJ822A	CARBON 8.2K 1/4WJ	1
R511	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R512	R2ESPJ331A	CARBON 330 1/4WJ	1
R513	R2ESPJ681A	CARBON 680 1/4WJ	1
R514	R2ESPJ103A	CARBON 10K 1/4WJ	1
R515	R2ESPJ392A	CARBON 3.9K 1/4WJ	1
R516	R2ESPJ5R6A	CARBON 5.6 1/4WJ	1
R517	R2ESPJ470A	CARBON 47 1/4WJ	1
R518	R2ESPJ2R2A	CARBON 2.2 1/4WJ	1
R519	R2ESPJ101A	CARBON 100 1/4WJ	1
R601	R2ESPJ103A	CARBON 10K 1/4WJ	1
R602	R2ESPJ392A	CARBON 3.9K 1/4WJ	1
R603	R2ESPJ102A	CARBON 1K 1/4WJ	1
R604	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R605	R2ESPJ102A	CARBON 1K 1/4WJ	1
R606	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R607	R2ESPJ223A	CARBON 22K 1/4WJ	1
R608	R2ESPJ151A	CARBON 150 1/4WJ	1
R609	R2ESPJ390A	CARBON 39 1/4WJ	1
R611	R2ESPJ221A	CARBON 220 1/4WJ	1
R612	R2ESPJ470A	CARBON 47 1/4WJ	1
R613	R2ESPJ101A	CARBON 100 1/4WJ	1
R614	R2ESPJ273A	CARBON 27K 1/4WJ	1
⚠R615	R2ESPJ471A	CARBON 470 1/4WJ	1
⚠R616	R2ESPJ470A	CARBON 47 1/4WJ	1
⚠R701	R2HCPK331A	SOLID 330 1/2WK	1
R702	R2ESPJ102A	CARBON 1K 1/4WJ	1
R703	R2ESPJ561A	CARBON 560 1/4WJ	1
R704	R2ESPJ122A	CARBON 1.2K 1/4WJ	1
⚠R705	R3HWYK270A	WIRE-W 27 5WK	1
R706	R2ESPJ102A	CARBON 1K 1/4WJ	1
R707	R2HCPK121A	SOLID 120 1/2WK	1
⚠R708	R2HCPK101A	SOLIDE 100 1/2WK	1
R709	R2ESUJ123A	CARBON 12K 1/4WJ	1
R710	R2ESUJ271A	CARBON 270 1/4WJ	1
R711	R2ESUJ682A	CARBON 6.8K 1/4WJ	1
R712	R2ESUJ471A	CARBON 470 1/4WJ	1
R713	R2ESPJ103A	CARBON 10K 1/4WJ	1
R800	R2ESPJ102A	CARBON 1K 1/4WJ	1
R801	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R802	R2ESPJ271A	CARBON 270 1/4WJ	1
R803	R2ESPJ683A	CARBON 68K 1/4WJ	1
R804	R2ESPJ103A	CARBON 10K 1/4WJ	1
R805	R2ESPJ221A	CARBON 220 1/4WJ	1
R806	R2ESPJ105A	CARBON 1M 1/4WJ	1
R812	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R820	R2ESUJ100A	CARBON 10 1/4WJ	1
R821	R2ESPJ223A	CARBON 22K 1/4WJ	1
R822	R2ESUJ154A	CARBON 150K 1/4WJ	1
R823	R2ESUJ103A	CARBON 10K 1/4WJ	1
R824	R2ESUJ123A	CARBON 12K 1/4WJ	1
R825	R2ESPJ563A	CARBON 56K 1/4WJ	1
R826	R2ESPJ332A	CARBON 3.3K 1/4WJ	1
R828	R2ESUJ564A	CARBON 560K 1/4WJ	1
R829	R2ESUJ101A	CARBON 100 1/4WJ	1
R830	R2ESPJ822A	CARBON 8.2K 1/4WJ	1
R831	R2ESPJ102A	CARBON 1K 1/4WJ	1
R835	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R837	R2ESUJ472A	CARBON 4.7K 1/4WJ	1

NOTICE:
1. Parts orders must contain Model Number, Parts Number and Description.
2. Ordering quantity of resistors must be multiple of 10pcs.
3. Component parts indicated by parentheses in the colum Q'ty are not available.

PARTS LIST (TV/AMP)

Schematic Location	Parts No.	Description	Q'ty
R840	R2ESUJ100A	CARBON 10 1/4WJ	1
R841	R2ESPJ681A	CARBON 680 1/4WJ	1
R842	R2ESPJ681A	CARBON 680 1/4WJ	1
R844	R2ESPJ473A	CARBON 47K 1/4WJ	1
R845	R2ESUJ684A	CARBON 680K 1/4WJ	1
R846	R2ESUJ332A	CARBON 3.3K 1/4WJ	1
R847	R2ESUJ221A	CARBON 220 1/4WJ	1
R848	R2ESPJ334A	CARBON 330K 1/4WJ	1
R849	R2ESPJ152A	CARBON 1.5K 1/4WJ	1
R850	R2ESPJ391A	CARBON 390 1/4WJ	1
R851	R2ESPJ221A	CARBON 220 1/4WJ	1
R852	R2ESPJ101A	CARBON 100 1/4WJ	1
R854	R2ESPJ102A	CARBON 1K 1/4WJ	1
R855	R2ESPJ563A	CARBON 56K 1/4WJ	1
R860	R2ESPJ332A	CARBON 3.3K 1/4WJ	1
R861	R2ESPJ153A	CARBON 15K 1/4WJ	1
R862	R2ESPJ331A	CARBON 330 1/4WJ	1
R863	R2ESPJ222A	CARBON 2.2K 1/4WJ	1
R864	R2ESPJ102A	CARBON 1K 1/4WJ	1
R865	R2ESPJ102A	CARBON 1K 1/4WJ	1
R866	R2ESPJ331A	CARBON 330 1/4WJ	1
R867	R2ESPJ393A	CARBON 39K 1/4WJ	1
R868	R2ESPJ102A	CARBON 1K 1/4WJ	1
R869	R2HCPK101A	SOLIDE 100 1/2WK	1
R870	R2ESPJ101A	CARBON 100 1/4WJ	1
⚠R871	R2HFPJ100A	F-OXIDE 10 1/2WJ	1
R873	R2ESUJ102A	CARBON 1K 1/4WJ	1
R901	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R902	R2ESPJ271A	CARBON 270 1/4WJ	1
R903	R2ESPJ683A	CARBON 68K 1/4WJ	1
R904	R2ESPJ103A	CARBON 10K 1/4WJ	1
R905	R2ESPJ221A	CARBON 220 1/4WJ	1
R906	R2ESPJ105A	CARBON 1M 1/4WJ	1
R912	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R920	R2ESUJ100A	CARBON 10 1/4WJ	1
R921	R2ESPJ223A	CARBON 22K 1/4WJ	1
R922	R2ESUJ154A	CARBON 150K 1/4WJ	1
R923	R2ESPJ103A	CARBON 10K 1/4WJ	1
R924	R2ESUJ123A	CARBON 12K 1/4WJ	1
R925	R2ESUJ563A	CARBON 56K 1/4WJ	1
R926	R2ESUJ332A	CARBON 3.3K 1/4WJ	1
R927	R2ESUJ822A	CARBON 8.2K 1/4WJ	1
R928	R2ESUJ564A	CARBON 560K 1/4WJ	1
R929	R2ESPJ101A	CARBON 100 1/4WJ	1
R930	R2ESPJ822A	CARBON 8.2K 1/4WJ	1
R931	R2ESPJ102A	CARBON 1K 1/4WJ	1
R935	R2ESPJ472A	CARBON 4.7K 1/4WJ	1
R937	R2ESUJ472A	CARBON 4.7K 1/4WJ	1
R940	R2ESPJ100A	CARBON 10 1/4WJ	1
R941	R2ESPJ681A	CARBON 680 1/4WJ	1
R942	R2ESUJ681A	CARBON 680 1/4WJ	1
R943	R2ESUJ822A	CARBON 8.2K 1/4WJ	1
R945	R2ESUJ684A	CARBON 680K 1/4WJ	1
R946	R2ESPJ332A	CARBON 3.3K 1/4WJ	1
R947	R2ESUJ221A	CARBON 220 1/4WJ	1
R948	R2ESUJ334A	CARBON 330K 1/4WJ	1
R949	R2ESPJ152A	CARBON 1.5K 1/4WJ	1
R950	R2ESPJ391A	CARBON 390 1/4WJ	1
R954	R2ESPJ102A	CARBON 1K 1/4WJ	1
R955	R2ESPJ563A	CARBON 56K 1/4WJ	1
R960	R2ESPJ332A	CARBON 3.3K 1/4WJ	1
R961	R2ESPJ153A	CARBON 15K 1/4WJ	1
R962	R2ESPJ331A	CARBON 330 1/4WJ	1
R963	R2ESPJ222A	CARBON 2.2K 1/4WJ	1
R964	R2ESPJ102A	CARBON 1K 1/4WJ	1
R965	R2ESPJ102A	CARBON 1K 1/4WJ	1
R966	R2ESPJ331A	CARBON 330 1/4WJ	1
R967	R2ESPJ393A	CARBON 39K 1/4WJ	1
R968	R2ESPJ102A	CARBON 1K 1/4WJ	1
R969	R2HCPK101A	SOLIDE 100 1/2WK	1
R973	R2ESUJ102A	CARBON 1K 1/4WJ	1

TUBES AND SEMICONDUCTORS

Schematic Location	Parts No.	Description	Q'ty
D001	4 2021 10970	IC ZE DIODE UPC574J	1
D002	4 2021 18770	SI DIODE MA56	1
D003	4 2021 18770	SI DIODE MA56	1
D004	4 2021 07470	SI DIODE 1S2076	1
D101	4 2021 18870	GE DIODE 1S188TV S	1
D151	4 2020 03500	GE DIODE 1S188TV	1
D152	4 2020 03500	GE DIODE 1S188TV	1
D153	4 2021 07470	SI DIODE 1S2076	1
D201	4 2021 07670	SI DIODE 1S2076A	1
D301	4 2020 03500	GE DIODE 1S188TV	1
D302	4 2020 03500	GE DIODE 1S188TV	1
D501	4 2021 07470	SI DIODE 1S2076	1
D502	4 2021 07470	SI DIODE 1S2076	1
D503	4 2021 07470	SI DIODE 1S2076	1
D601	4 2020 03500	GE DIODE 1S188TV	1
D602	4 2020 03500	GE DIODE 1S188TV	1
D603	4 2021 07470	SI DIODE 1S2076	1
D604	4 2021 10670	SI DIODE SIB01-02	1
D606	4 2021 10670	SI DIODE SIB01-02	1
D607	4 2021 10270	SI DIODE ERB24-04D	1
⚠D701	4 2021 10670	SI DIODE SIB01-02	1
⚠D702	4 2021 10670	SI DIODE SIB01-02	1
⚠D703	4 2021 10670	SI DIODE SIB01-02	1
⚠D704	4 2021 10670	SI DIODE SIB01-02	1
D705	4 2021 11070	ZE DIODE WZ-075	1
or	4 2021 16370	ZE DIODE RD7.5E	1
D706	4 2021 17770	LED SLP-131B	1
D707	4 2021 17770	LED SLP-131B	1
D801	4 2021 07470	SI DIODE 1S2076	1
D802	4 2021 07470	SI DIODE 1S2076	1
D803	4 2020 03500	GE DIODE 1S188TV	1
D804	4 2020 03500	GE DIODE 1S188TV	1
D901	4 2021 07470	SI DIODE 1S2076	1
D902	4 2021 07470	SI DIODE 1S2076	1
D903	4 2020 03500	GE DIODE 1S188TV	1
D904	4 2020 03500	GE DIODE 1S188TV	1
IC800	4 2061 08870	IC-LA3160	1
IC801	4 2061 08370	IC-TA7137P B	1
or	4 2061 08570	IC-LA3210	1
IC802	4 2061 08470	IC-TA7140P	1
IC803	4 2061 08270	IC-LA4112	1
IC901	4 2061 08370	IC-TA7137P B	1
or	4 2061 08570	IC-LA3210	1
IC902	4 2061 08470	IC-TA7140P	1
IC903	4 2061 08270	IC-LA4112	1
Q101	TG2SC2057-D1-	SI TR 2SC2057	1
Q102	TG2SC2057-D1-	SI TR 2SC2057	1
Q103	TG2SC930-----	SI TR 2SC930	1
Q104	TG2SC930-----	SI TR 2SC930	1
Q151	TN2SA733-----	SI TR 2SA733	1
Q152	TG2SC536-----	SI TR 2SC536	1
or	TN2SC945-----	SI TR 2SC945	1
Q201	TG2SC930-----	SI TR 2SC930	1
Q202	TG2SC2274K---	SI TR 2SC2274K	1
Q301	TG2SC930-----	SI TR 2SC930	1
Q302	TG2SC930-----	SI TR 2SC930	1
Q401	TN2SA733-----	SI TR 2SA733	1
Q501	TG2SC536-----	SI TR 2SC536	1
or	TN2SC945-----	SI TR 2SC945	1
Q502	TG2SC536--F--	SI TR 2SC536	1
Q503	TG2SD545-----1	SI TR 2SD545	1
Q504	TG2SB598-----1	SI TR 2SB598	1
Q601	TG2SC536-----	SI TR 2SC536	1
or	TN2SC945-----	SI TR 2SC945	1
Q602	TG2SC536-----	SI TR 2SC536	1
or	TN2SC945-----	SI TR 2SC945	1
Q603	TG2SD325R----	SI TR 2SD325R	1
Q701	TG2SD313-----	SI TR 2SD313	1
Q702	TG2SC536-----	SI TR 2SC536	1
or	TN2SC945-----	SI TR 2SC945	1

NOTICE:
1. Parts orders must contain Model Number, Parts Number and Description.
2. Ordering quantity of resistors must be multiple of 10 pcs.
3. Component parts indicated by parentheses in the colum Q'ty are not available.

PARTS LIST (TV/AMP)

Schematic Location	Parts No.	Description	Q'ty
Q703	TN2SA733-----	SI TR 2SA733	1
Q704	TG2SB507-----	SI TR 2SB507	1
Q705	TG2SC536-----	SI TR 2SC536	1
or	TN2SC945-----	SI TR 2SC945	1
Q706	TG2SC536-----	SI TR 2SC536	1
or	TN2SC945-----	SI TR 2SC945	1
Q803	TG2SC1571L---	SI TR 2SC1571L	1
Q804	TG2SC1571L---	SI TR 2SC1571L	1
Q903	TG2SC1571L---	SI TR 2SC1571L	1
Q904	TG2SC1571L---	SI TR 2SC1571L	1
TH501	4 2041 04770	THERMISTOR SDT-100	1
TH701	4 2041 04770	THERMISTOR SDT-100	1
V201	QEW100EB4	CRT 100EB4	1
or	QNW100EB4	CRT 100EB4	1

NOTICE:
1. Parts orders must contain Model Number, Parts Number and Description.
2. Ordering quantity of resistors must be multiple of 10 pcs.
3. Component parts indicated by parentheses in the colum Q'ty are not available.

PARTS LIST (RADIO)

ELECTRICAL PARTS

Schematic Location	Parts No.	Description	Q'ty
	4 2311 08570	ROTARY SWITCH	1
	4 2351 67370	1P JACK	1
	4 2361 12270	2P MICRO PLUG	1
	4 2361 12470	5P MICRO PLUG	1
	111 2 6220 11100	WIRE WRAP TERMINAL	4
	4 2261 39770	PC BOARD 7GA-D	1
RCF1	4 2531 11870	CERAMIC FILTER 10.7M	1
RCR1	4 2271 05870	CR NOTCH FILTER	1
RCR2	4 2271 05870	CR NOTCH FILTER	1
RC01	C2HCDK150SL-	CERAMIC 15P SL 500V	1
RC03	C1HCDK390SL-	CERAMIC 39P SL 50V	1
RC04	C1HCDC100SL-	CERAMIC 10P SL 50V	1
RC05	C1HCDK330SL-	CERAMIC 33P SL 50V	1
RC06	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC07	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC08	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC09	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC10	C1HCDK150SL-	CERAMIC 15P SL 50V	1
RC11	C1HCDC6R0RH-	CERAMIC 6P RH 50V	1
RC12	C1HCDC5R0SL-	CERAMIC 5P SL 50V	1
RC13	C1HCDC5R0SL-	CERAMIC 5P SL 50V	1
RC14	C1HCDK221SL-	CERAMIC 220P SL 50V	1
RC15	C1HCDC2R0RH-	CERAMIC 2P RH 50V	1
RC16	C1HYDK102W--	CERAMIC 1000P W 50V	1
RC17	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC18	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC19	C1HCDG100SL-	CERAMIC 10P SL 50V	1
RC20	C1HCDJ180SL-	CERAMIC 18P SL 50V	1
RC21	C1HCDD8R0RH-	CERAMIC 8P RH 50V	1
RC22	C1HYDP473Z--	CERAMIC 47000P Z 50V	1
RC23	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC24	C1HFRK472A--	MYLAR 0.0047M 50V	1
RC25	C1HFRK103A--	MYLAR 0.01M 50V	1
RC26	C1HFRK102A--	MYLAR 0.001M 50V	1
RC27	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC28	C1HFRK102A--	MYLAR 0.001M 50V	1
RC29	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC30	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC32	C1HYDP103Z--	CERAMIC 10000P Z 50V	1
RC33	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC34	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC35	C1HFRK223A--	MYLAR 0.022M 50V	1
RC36	C1HFRK472A--	MYLAR 0.0047M 50V	1
RC37	C1HFRK223A--	MYLAR 0.022M 50V	1
RC38	C1ERE-475A--	ELECT 4.7M 25V	1
RC39	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC40	C1HCDJ330UJ-	CERAMIC 33P UJ 50V	1
RC41	C1HCDK221SL-	CERAMIC 220P SL 50V	1
RC42	C1HCDK221SL-	CERAMIC 220P SL 50V	1
RC43	C1ERE-475A--	ELECT 4.7M 25V	1
RC44	C1HCDK221SL-	CERAMIC 220P SL 50V	1
RC45	C1HYDP473Z--	CERAMIC 47000P Z 50V	1
RC46	C1HYDP473Z--	CERAMIC 47000P Z 50V	1
RC47	C0JRE-107A--	ELECT 100M 6.3V	1
RC48	C1VTDM224A--	TANTAL 0.22M 35V	1
RC49	C1HCDK101SL-	CERAMIC 100P SL 50V	1
RC50	C1HCDC4R0RH-	CERAMIC 4P RH 50V	1
RC52	C1HFRK152A--	MYLAR 0.0015M 50V	1
RC53	C1ERE-475A--	ELECT 4.7M 25V	1
RC54	C1HRE-105A--	ELECT 1M 50V	1
RC55	C1HRE-105A--	ELECT 1M 50V	1
RC56	C1HRE-105A--	ELECT 1M 50V	1
RC57	C1HFRK472A--	MYLAR 0.0047M 50V	1
RC58	C1HFRK472A--	MYLAR 0.0047M 50V	1
RC59	C1ARE-107A--	ELECT 100M 10V	1
RC60	C1CRE-107A--	ELECT 100M 16V	1
RC61	C1HSEK472A--	STYROL 4700P 50V	1
RC62	C1HSEK222A--	STYROL 2200P 50V	1
RC64	C1HFRK103A--	MYLAR 0.01M 50V	1
RC65	C1HCDK220SL-	CERAMIC 22P SL 50V	1
RC66	C1HCDC100RH-	CERAMIC 10P RH 50V	1
RC67	C1HCDC4R0RH-	CERAMIC 4P RH 50V	1
RC68	C1HCDK390RH-	CERAMIC 39P RH 50V	1
RC69	C1HYDK222W--	CERAMIC 2200P W 50V	1
RC70	C1HCDC6R0RH-	CERAMIC 6P RH 50V	1
RC71	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC72	C1HYDP223Z--	CERAMIC 22000P Z 50V	1
RC73	C1HRE-225A--	ELECT 2.2M 50V	1
RC74	C1HCDC6R0RH-	CERAMIC 6P RH 50V	1
RD01	4 2021 07470	SI DIODE 1S2076	1
RD02	4 2021 07470	SI DIODE 1S2076	1
RD03	4 2021 07470	SI DIODE 1S2076	1
RD04	4 2021 15370	VARACTOR DIODE 1S553	1
RD05	4 2021 07470	SI DIODE 1S2076	1
RD06	4 2021 07470	SI DIODE 1S2076	1
RD07	4 2021 15270	GE DIODE 1S188FM	1
RD08	4 2021 15270	GE DIODE 1S188FM	1
RD09	4 2021 18170	ZE DIODE RD5.1EB	1
RD10	4 2021 15270	GE DIODE 1S188FM	1
RD11	4 2021 15270	GE DIODE 1S188FM	1
RIC1	4 2061 07770	IC-LA1201C	1
RIC2	4 2061 08170	IC-LA3301	1
RL01	4 2571 04470	ANTENNA COIL	1
RL02	4 2591 04470	FM RF COIL	1
RL03	4 2591 04570	FM RF COIL	1
RL04	4 2591 04670	FM RF COIL	1
RL05	4 2591 04770	FM RF COIL	1
RL06	4 2581 04171	OSCILATOR COIL	1
RL07	4 2591 04870	FM CHALK COIL	1
RL08	4 2571 04670	BAR ANTENNA	1
RQ01	TG2SC668--D--	SI TR 2SC668	1
RQ02	TG2SC930--E--	SI TR 2SC930	1
RQ03	TG2SC930--E--	SI TR 2SC930	1
RQ04	TG2SC668--D--	SI TR 2SC668	1
RQ05	TG2SC930--E--	SI TR 2SC930	1
RQ06	TG2SA608--E--	SI TR 2SA608	1
RR01	R2ESUJ473A	CARBON 47K 1/4WJ	1
RR02	R2ESPJ562A	CARBON 5.6K 1/4WJ	1
RR03	R2ESUJ101A	CARBON 100 1/4WJ	1
RR04	R2ESUJ184A	CARBON 180K 1/4WJ	1
RR05	R2ESUJ221A	CARBON 220 1/4WJ	1
RR06	R2ESUJ153A	CARBON 15K 1/4WJ	1
RR07	R2ESPJ222A	CARBON 2.2K 1/4WJ	1
RR08	R2ESPJ153A	CARBON 15K 1/4WJ	1
RR09	R2ESUJ682A	CARBON 6.8K 1/4WJ	1
RR11	R2ESUJ104A	CARBON 100K 1/4WJ	1
RR12	R2ESPJ153A	CARBON 15K 1/4WJ	1
RR13	R2ESPJ103A	CARBON 10K 1/4WJ	1
RR14	R2ESUJ122A	CARBON 1.2K 1/4WJ	1
RR15	R2ESUJ220A	CARBON 22 1/4WJ	1
RR16	R2ESUJ561A	CARBON 560 1/4WJ	1
RR17	R2ESUJ332A	CARBON 3.3K 1/4WJ	1
RR18	R2ESUJ331A	CARBON 330 1/4WJ	1
RR19	R2ESUJ330A	CARBON 33 1/4WJ	1
RR20	R2ESPJ102A	CARBON 1K 1/4WJ	1
RR21	R2ESUJ221A	CARBON 220 1/4WJ	1
RR22	R2ESPJ104A	CARBON 100K 1/4WJ	1
RR23	R2ESUJ271A	CARBON 270 1/4WJ	1
RR24	R2ESUJ104A	CARBON 100K 1/4WJ	1
RR25	R2ESUJ222A	CARBON 2.2K 1/4WJ	1
RR26	R2ESUJ102A	CARBON 1K 1/4WJ	1
RR27	R2ESUJ103A	CARBON 10K 1/4WJ	1
RR28	R2ESUJ912A	CARBON 9.1K 1/4WJ	1
RR29	R2ESUJ271A	CARBON 270 1/4WJ	1
RR30	R2ESUJ271A	CARBON 270 1/4WJ	1
RR31	R2ESUJ102A	CARBON 1K 1/4WJ	1
RR32	R2ESUJ102A	CARBON 1K 1/4WJ	1
RR33	R2ESUJ562A	CARBON 5.6K 1/4WJ	1
RR34	R2ESUJ562A	CARBON 5.6K 1/4WJ	1
RR35	R2ESUJ102A	CARBON 1K 1/4WJ	1
RR36	R2ESUJ105A	CARBON 1M 1/4WJ	1

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3. Component parts indicated by parentheses in the colum Q'ty are not available.

PARTS LIST (RADIO)

Schematic Location	Parts No.	Description	Q'ty
RR37	R2HCPK271A	SOLID 270 1/2WK	1
RR38	R2ESUJ562A	CARBON 5.6K 1/4WJ	1
RR39	R2ESUJ152A	CARBON 1.5K 1/4WJ	1
RR40	R2ESUJ102A	CARBON 1K 1/4WJ	1
RR41	R2ESPJ821A	CARBON 820 1/4WJ	1
RR42	R2ESPJ222A	CARBON 2.2K 1/4WJ	1
RR43	R2ESUJ104A	CARBON 100K 1/4WJ	1
RR44	R2ESPJ471A	CARBON 470 1/4WJ	1
RR45	R2ESUJ102A	CARBON 1K 1/4WJ	1
RR46	R2ESUJ562A	CARBON 5.6K 1/4WJ	1
RR47	R2ESUJ562A	CARBON 5.6K 1/4WJ	1
RR48	R2ESUJ821A	CARBON 820 1/4WJ	1
RR49	R2ESUJ101A	CARBON 100 1/4WJ	1
RR50	R2ESUJ103A	CARBON 10K 1/4WJ	1
RR51	R2ESUJ103A	CARBON 10K 1/4WJ	1
RR52	R2ESPJ222A	CARBON 2.2K 1/4WJ	1
RR53	R2ESUJ121A	CARBON 120 1/4WJ	1
RR55	R2ESPJ821A	CARBON 820 1/4WJ	1
RR70	R2ESUJ474A	CARBON 470K 1/4WJ	1
RR71	R2ESUJ392A	CARBON 3.9K 1/4WJ	1
RR72	R2ESPJ104A	CARBON 100K 1/4WJ	1
RR73	R2ESUJ274A	CARBON 270K 1/4WJ	1
RR74	R2ESUJ101A	CARBON 100 1/4WJ	1
RR75	R2ESUJ474A	CARBON 470K 1/4WJ	1
RR76	R2ESUJ122A	CARBON 1.2K 1/4WJ	1
RT01	4 2561 07070	FM IF TRANS	1
RT02	4 2561 07170	AM IF TRANS	1
RT03	4 2561 07170	AM IF TRANS	1
RT04	4 2561 07270	AM IF TRANS	1
RT05	4 2561 07370	FM IF TRANS	1
RT06	4 2561 07470	FM IF TRANS	1
RT07	4 2561 07571	MPX COIL	1
RT08	4 2561 07671	MPX COIL	1
RT09	4 2561 07771	AM OSC TRANS	1
RVC1	4 2241 04370	VARICON	1
RVR1	4 2221 27370	10N3FRB-1K	1
MECHANICAL PARTS			
	111 0 1641 14770	RADIO KNOB ASSY-TKD	1
	111 2 1641 22270	RADIO KNOB-TKD	(1)
	111 2 1671 10170	KNOB BELT-TKD	(1)
	111 0 4131 04670	ROLLER MTG ASSY-TKD	1
	111 2 4131 11170	ROLLER DIAL-TKD	(1)
	111 2 3351 12770	ROLLER HOLDER-TKD	(1)
	111 2 4231 10570	SHAFT ROLL DIAL-TFR	(1)
	111 2 1531 15373	RADIO IND DRUM-TKD-C	1
	111 2 3121 17370	RADIO CHASSIS-TKD	1
	111 2 3351 12670	SHAFT HOLDER-TKD	1
	111 2 3631 23670	ANT HOLDER-TKD	2
	111 2 3991 10580	SHAFT LOCK-SJ	2
	111 2 4111 13470	SHAFT DIAL-TKD	1
	111 2 4131 10770	ROLLER DIAL-TFR	2
	111 2 4131 11070	VC PULLEY-TKD	1
	111 2 4131 11270	ARM ROLLER DIAL-TKD	4
	111 2 5111 11470	COIL SPRING-TFR	1
	101 3 1102 60803	SNB , 2.6X 8, Z1	1
	105 3 1502 60001	KSOWA, 2.6, Z1	1
	102 3 2203 01001	SBT , 3.0X 10, Z1	4
	102 3 2203 01001	SBT , 3.0X 10, Z1	2
	102 3 2203 01001	SBT , 3.0X 10, Z1	1
	102 3 2203 01001	SBT , 3.0X 10, Z1	1
	111 6 9421 00800	CRAPE MSK TAPE	Z
	111 6 9541 10300	DIAL STRING	Z
	338 1 0100 63000	SOLDER D	L
	338 1 0500 40000	SOLDER 40	L
	536 1 0100 00100	PARAFFIN OIL	L
	589 1 1301 64000	FLUX Y-20-SE	L
	520 1 0900 00400	SETSUGAN OIL	L
	520 1 0900 00500	SI GREASE G-30M	L
	520 1 0900 00500	SI GREASE G-30M	L
	580 1 1600 00300	RAIHI LOCK NO.3-C	L
	580 1 1600 00300	RAIHI LOCK NO.3-C	L
	580 1 CEME 540---	CEMEDINE #540	L

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PARTS LIST (TAPE RECORDER MECHANISM)

Schematic Location	Parts No.	Description	Q'ty
	4 2319 72741	LEAF SWITCH	1
	4 2429 20130	HEAD	1
	4 2429 70280	ERASER HEAD	1
	4 5279 70750	MOTOR	1
	141 0 1619 23200	BUTTON SELECT ASSY	1
	141 2 1619 47300	BUTTON SELECT STOP	1
	141 2 1619 47301	BUTTON SELECT PLAY	4
	141 2 1619 47302	BUTTON SELECT RECORD	1
	141 2 6139 09400	FRAME BUT	1
	141 2 6119 09800	LEVER BUTTON	6
	141 2 8519 40600	SPG LEVER STOP	4
	141 2 8519 40500	SPG LEVER FF	2
	141 2 8519 40701	SPG PLATE LOCK	1
	141 2 6129 01500	SPDL LEVER BUT	1
	112 3 1303 00040	E RING M3.0	1
	141 2 7319 22001	PLATE LOCK	1
	141 0 3119 15000	CHASSIS ASSY	1
	141 2 3119 05900	CHASSIS	1
	141 2 7529 39400	PIN FIX	1
	141 2 7529 36800	PIN ADJ	1
	141 2 5719 03800	HOLDER CAPSTAN	1
	141 2 5349 02700	SPDL REEL	2
	141 2 7519 17800	POST REC	1
	141 2 7519 17700	POST CHASSIS	2
	141 2 7519 18100	PIN SELECT	1
	141 2 7519 21600	POST SELECT	1
	141 2 7519 18200	POST LINK	1
	141 2 7529 44500	PIN SLIDE PAUSE	1
	141 2 7519 36600	POST PAUSE LEVER	1
	141 2 7529 35900	POST ARM	1
	141 2 3779 07900	POST PCB	1
	141 2 7529 36700	PIN SUPPORT	2
	141 0 3519 08500	ASSY SUPPORT	1
	141 2 3519 24500	SUPPORT FLYWHEEL	1
	141 2 4469 00200	PAD FLYWHEEL SPDL	1
	141 0 5219 01601	FLYWHEEL ASSY	1
	141 0 5219 02100	ASSY FLYWHEEL	1
	141 2 5219 04500	FLYWHEEL	1
	141 2 5719 05500	BUSH FLYWHEEL	1
	141 2 5219 00200	SPINDLE CAPSTAN	1
	141 0 5419 01100	ASSY PINCH ROLLER	1
	141 2 5459 00400	ARM PINCH ROLLER	1
	141 2 5419 00900	PINCH ROLLER	1
	141 2 5429 01100	SPDL PINCH ROLLER	1
	141 0 5519 02604	TAKE UP PULLEY ASSY	1
	141 2 5519 15800	PULLEY TAKE UP	1
	141 2 5519 15900	BUSH FRICTION	1
	141 2 4419 09900	WASHER FRICTION	1
	141 2 5719 04200	BUSH PULLEY	1
	141 2 5559 01700	ARM TAKE UP	1
	141 2 5719 00400	BUSH TAKE UP PULLEY	1
	141 2 5529 00600	SPDL TAKE UP PULLEY	1
	141 2 5519 00400	DRIVING ROLLER	1
	141 2 4569 05300	WASHER SPG	1
	141 2 8519 51300	SPG FRICTION	1
	141 2 5719 05800	BUSH	1
	141 0 5559 01200	ASSY ARM IDLER	1
	141 2 5559 02200	ARM IDLER	1
	141 2 5529 02800	SPINDLE IDLER	1
	141 0 5559 01301	ASSY ARM REW	1
	141 2 5559 02301	ARM REW	1
	141 2 5529 03800	SPINDLE JOINT	1
	141 0 7319 11200	ASSY BASE SLIDE	1
	141 2 7319 17500	BASE SLIDE	1
	141 2 5469 00200	SPDL PINCH ROL ARM	1
	141 2 3769 04700	POST RP HEAD	2
	141 2 3769 04600	POST AZIMUTH	1
	141 2 3769 04500	POST E HEAD	2
	141 0 7319 14600	ASSY PLATE PAUSE	1
	141 2 7319 17802	PLATE PAUSE	1
	141 2 7529 32300	PIN PAUSE	1
	141 0 7419 09300	ASSY PLATE SENSER	1
	141 2 7419 24900	PLATE SENSER	1
	141 2 8219 10400	SENSER END	1
	141 0 7419 09401	ASSY LINK	1
	141 2 7419 25000	PLATE LINK BASE	1
	141 2 7419 25300	PLATE LINK	1
	141 2 7519 19400	PIN LINK BASE	1
	141 2 7519 18000	PIN LINK CHASSIS	1
	141 0 8419 03700	PLATE RECORD ASSY	1
	141 2 8419 08800	PLATE RECORD	1
	141 2 8539 31100	SPRING RECORD SW	1
	108 3 3902 60350	TIR M2.6X3	1
	141 2 3519 23300	BRKT CHASSIS	1
	141 2 3529 11500	SPACER GUIDE	1
	141 2 3529 11700	SPACER STOP	1
	141 2 3529 11701	SPACER RECORD	1
	141 2 3529 11900	SPACER BASE	1
	141 2 3529 16201	SPACER HEAD	1
	141 2 3779 14300	DECK MTG BRKT TKD R	1
	141 2 3779 14400	DECK MTG BRKT TKD L	1
	141 2 4219 09000	SCREW	2
	141 2 4539 06700	WASHER	1
	141 2 4729 03600	LUG	1
	141 2 5319 03100	REEL	2
	141 2 5319 03500	FIN REEL	2
	141 2 5369 00400	CAP REEL PLATE	2
	141 2 5519 02100	JOINT	1
	141 2 5519 09400	IDLER ROLLER	1
	141 2 5649 01701	BELT DRIVE	1
	141 2 5649 10300	BELT COUNTER	1
	141 2 7149 01300	BRAKE	1
	141 2 7319 24801	PLATE SELECT	1
	141 2 7419 25200	LEVER PAUSE	1
	141 2 7419 27000	LEVER REC STOP	1
	141 2 7419 27100	LEVER STOP	1
	141 2 7419 31800	LEVER REVIEW	1
	141 2 7419 31900	LEVER CUE	1
	141 2 7419 33400	LEVER STOP EJECT	1
	141 2 7419 33600	PLATE EJECT	1
	141 2 7419 35700	LEVER EJECT	1
	141 2 7419 38301	LEVER PAUSE LOCK	1
	141 2 7529 43800	PIN PAUSE LEVER	1
	141 2 8119 05100	COUNTER	1
	141 2 8139 03300	BRACKET COUNTER	1
	141 2 8419 05300	INTERLOCK	1
	141 2 8519 01800	SPG REWIND ROLLER	1
	141 2 8519 14800	SPG LEVER STOP RECD	1
	141 2 8519 19300	SPG BRAKE	1
	141 2 8519 24400	SPG ADZMUTH	1
	141 2 8519 24900	SPG LEVER REWIND	1
	141 2 8519 34100	SPG REW	1
	141 2 8519 36500	SPG PAUSE	1
	141 2 8519 39300	SPG BASE SLIDE	1
	141 2 8519 40800	SPG ASO	1
	141 2 8519 40900	SPG PINCH ROLL	1
	141 2 8519 41001	SPG TAKE UP	1
	141 2 8519 41400	SPG IDLER	1
	141 2 8519 42500	SPG REVIEW	1
	141 2 8519 46800	SPG REEL	2
	141 2 8519 69700	SPRING PLATE RECORD	1
	141 2 8539 23100	SPG INTERLOCK	1
	141 2 8539 23301	SPG CASSETTE	1
	141 6 4559 00100	SERIAL NO SHEET	1
	769 3 0802 80000	1SCT UL1561AWG28GY	1
	806 3 0202 40000	2SC UL2592AWG28RE	1
	806 3 0902 40000	2SC UL2592AWG28WH	1
	110 3 9200 70034	WASHER M2.0X7X0.3	1
	110 3 9350 70025	W 3.5X 7.0X0.2	1
	110 3 1202 60011	FW M2.6	1
	110 3 1202 60011	FW M2.6	1
	112 3 1301 20040	E RING M1.2	1
	112 3 1301 20040	E RING M1.2	2
	112 3 1301 50040	E RING M1.5	1
	112 3 1301 50040	E RING M1.5	1
	112 3 1302 00040	E RING M2.0	1

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Schematic Location	Parts No.	Description	Q'ty
	112 3 1302 00040	E RING M2.0	1
	112 3 1302 00040	E RING M2.0	1
	112 3 1302 00040	E RING M2.0	1
	112 3 1302 00040	E RING M2.0	1
	112 3 1302 50040	E RING M2.5	1
	112 3 1303 00040	E RING M3.0	2
	141 2 4219 03700	SCREW PLATE BRAKE	1
	141 2 4219 03700	SCREW PLATE BRAKE	1
	101 3 1802 00511	TMS M2.0X5	4
	101 3 2502 00611	-CMS M2.0X6	1
	101 3 1303 00411	PMS M3.0X4	2
	103 3 1302 60611	PTS-2 M2.6X6	1
	103 3 1302 60611	PTS-2 M2.6X6	1
	103 3 1302 61211	PTS-2 M2.6X12	1
	141 2 4219 06300	SCREW	1
	141 2 4219 06300	SCREW	1
	103 3 1302 60511	PTS-2 M2.6X5	2
	103 3 1702 00511	BTS-2 M2.0X5	1
	103 3 1302 60611	PTS-2 M2.6X6	4
	101 3 1302 60611	PMS M2.6X6	2
	110 3 1103 00011	SRW M3.0	1
	103 3 1302 60511	PTS-2 M2.6X5	1
	110 3 1202 60011	FW M2.6	1
	141 2 8519 19300	SPG BRAKE	1

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